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Essays on the relations between European police forces and their stakeholders

Melody Barlage

Essays on the relations between European police forces and their stakeholders

Proefschrift

ter verkrijging van de graad van doctor aan Tilburg University op gezag van de rector magnificus, prof. dr. Ph. Eijlander, in het openbaar te verdedigen ten overstaan van een door het college voor promoties aangewezen commissie in de aula van de Universiteit op
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Voor mijn ouders

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I always like to consider my time as a PhD candidate somewhat special. In 2010 I got the great opportunity to work on a European Commission project that studies police organisations. Since I have a weakness for men in uniforms, I did not have to think twice before taking up the offer (the research opportunities seemed interesting too, obviously). While many of my colleagues were locked away in the office, struggling with econometrics or model building, I often found myself police stations and such, talking my 'research subjects'. Being fully externally funded meant I never had to teach or supervise theses, so I could dedicate all my time to research. It does mean however, that you have to be a bit flexible in following your money. When my supervisors left for Tilburg University after I worked for 1.5 years at Utrecht School of Economics I naturally followed. I've spend three years travelling back and forth between universities, project meetings all over Europe, police professionals and *Veiligheidshuizen*. Yet, I had a sense of belonging, no matter where I worked, because of the great people I have met along the years. Home was where I popped open my laptop, even is that was at a gas station next to the A27, while waiting for a traffic jam to resolve.

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Chapter 1

Introduction

The notion that organisations cannot work alone in their environment originally has its roots in sociology (Weber, 1947). In the 1960's the Stanford Research Institute claimed that understanding the concerns of stakeholders is necessary in developing support for objectives that are essential for the long term success of the corporation (Freeman, 1984). We define a stakeholder as "any group or individual who can affect or is affected by the achievement of the firm's objectives" (Freeman, 1984). From the perspective of resource dependency (Pfeffer and Salancik, 1978), it seems fairly straightforward that in order to survive, organisations have to deal with stakeholders in their environment in order to acquire the resources needed. Having resources, or having good connections to those possessing the resources, creates a more stable environment. If the focal organisation knows what to expect and when, it will be less susceptible to external expectations it cannot meet. Most organisations need to get into some sort of relationships with outsiders in order to be successful, such as with suppliers, customers, shareholders, unions, regulators, interest groups and competitors. Not surprisingly, many literatures in the field of strategy and marketing are available on topics related to this, such as alliance theory and corporate social responsibility studies. Yet, the empirical support for stakeholder management as an instrument to better overall

social or financial performance is not overwhelmingly clear (Donaldson and Preston, 1995).

Oftentimes, these literatures on stakeholder management are focused on for-profit organisations. Yet, organisations in the public sector also have to deal with stakeholders, and may need to do so in order to achieve goals. Public organisations must handle additional factors in their stakeholder mapping, such as their legal framework and ethical considerations (Scholes and Johnson, 2001). More than private organisations, public organisations function because of the legitimacy they get from the citizenry (Scholes and Johnson, 2001). In order to conserve their legitimacy, public organisations need to maintain relations with stakeholders that do not per se offer strategic resources. The citizenry has by itself intrinsic value to the public organisation. The legitimacy they offer to the public organisation is crucial, especially for organisations as the police, who execute authority and force against citizens. Police organisations are also very interesting in terms of stakeholder management as they are a grand example of a public organisation that is surrounded by stakeholders at all levels of the organisation. The police deal with an enormous range of stakeholders, some of which need the police for execution of their core tasks, such as public prosecution services. Yet, there are also stakeholders that involuntarily get involved with the police, such as suspects and perpetrators. In this broad range of stakeholders who help the police carry out their work and stakeholders who *are* their work (e.g., criminals, rioters or hooligans), it is unclear for many police forces how to approach this issue, and how to keep all of them (or at least most of them) satisfied to retain their legitimacy as an organisation.

In this thesis, we try to learn more about stakeholder management in police organisations. On the one hand, we do this to attempt to close some gaps in the literature on stakeholder management in the policing sector. On the other hand, an elaborate study is desired from a practical perspective. As police forces and many individual officers cope with external parties on a daily basis, it is highly relevant to ask if they are doing it right, and if they could

do it in ways that are more satisfactory for the stakeholder. We have approached this topic from several angles, looking at both strategic and operational stakeholder management. In this thesis, we have dedicated two studies to European forces and two studies to the Dutch police, yet we think that the findings apply to some extent to a broader range of countries, and in fact may apply to a broader range of public organisations, even beyond the field of law enforcement and order maintenance. Although much has been written about how corporations and public organisations deal with a range of external parties, it is seldom that different kinds of stakeholders are studied at once in the policing industry. They usually study the relation between the police and one stakeholder, such as probation, citizens or media (Chermak and Weiss, 2005; Murphy and Lutze, 2009; Skogan, 2005). In this thesis, we will study the stakeholder environment more broadly.

1.1 Stakeholder theory

The idea that corporations have stakeholders has been well accepted in the management literature for a few decades, especially since Freeman's 1984 book *Strategic Management: A Stakeholder Approach* (Donaldson and Preston, 1995). The use of the stakeholder concept in the literature has been, and still is up to this day, an endless dispute as a recent book edited by Phillips, *Stakeholder Theory: Impact and Prospects*, demonstrates (2011). What a stakeholder is, is still open to interpretation, there exist numerous stakeholder-mapping techniques, there is no agreement on the value creation and salience of stakeholders, and the concept is commonly modified depending on the circumstances, because of its open character. Various users fight for the precedence of their own interpretation of the stakeholder concept (Mitchell, 2012). Stakeholder theory has been described mostly as descriptive, instrumental and normative, each ample with its own managerial implications (Donaldson and Preston, 1995).

Descriptive stakeholder theory formulates a model of the firm

to explain specific characteristics and behaviours. There is ample evidence showing that managers believe to practise stakeholder management, and that they think it is ethical to do so. Another descriptive justification for stakeholder theory stems from existing practises and institutions, including laws that allow stakeholders to protest against actions of a focal organisation. Organisations may be relieved to find that they are not the only ones adopting stakeholder management, but they do not necessarily justify a theory. Using purely descriptive data may lead to a "naturalistic fallacy" (Moore, 1959), where the theory moves from describing to evaluating without the supporting analyses or explanations. Because there is only descriptive justification, new evidence that describes opposing or different stylized facts would invalidate the theory.

The instrumental perspective provides justification for stakeholder theory based on the idea that the link between stakeholder management and organisational performance should be examined. The argument that stakeholder management and performance go hand in hand has been broadly adapted in the management literature. From a stakeholder-agency perspective, the argument is that stakeholders can monitor managers and use enforcement mechanisms to curb opportunistic behaviour by managers (Hill and Jones, 1992). Although the bulk of research on stakeholder management is (implicitly) based on instrumental stakeholder theory, there is no structural or compelling evidence that stakeholder management is the optimal strategy for maximising conventional performance measures of firms. Choi and Wang (2009) are one of the few who manage to convincingly tie stakeholder management to financial performance of firms, but they argue in turn that other firm resources, such as technological knowledge, are more important for financial performance. This does not mean however that stakeholder management is futile. Studies demonstrate that firms can benefit from managing stakeholders satisfactorily, on issues that may only be part of overall performance. It is for example commonly accepted in the field of project management that effective stakeholder management is important for the success of a project

(Achterkamp and Vos, 2008). Also, an organisation may reap benefits from its relation with a particular stakeholder, such as customers (Chang et al., 2010b; Kim et al., 2010; Zablah et al., 2012), suppliers (Srinivasan et al., 2011; Stuart et al., 2012) or partners, for example in the form of joint ventures (Mellewigt and Das, 2010).

Much of the stakeholder literature also comes from the normative realm, as it is also often related to business ethics (Hasnas, 2013). One of the central concepts here is that organisations should tend to all stakeholders, not just their own. It prescribes how all stakeholders should be treated on the basis of some underlying moral or philosophical principles. Each group of stakeholders needs to be considered for their own sake, and not just because of their ability to (instrumentally) benefit the interests of the organisation (Phillips, 2011). Establishing accountability to all stakeholders requires showing that they have a legitimate claim regarding the business, not that they are functionally useful to it (Sternberg, 1997). From the perspectives of business ethics, researchers use stakeholder theory as a moral lens that offers ethical guidance to managers as they have to face normative questions to run their businesses with integrity and self-reflection (Freeman et al., 2010).

Though stakeholder theory has different approaches, Donaldson and Preston (1995) argue that the three aspects are nested within each other. The peripheral aspect of the theory is descriptive, presenting practises that are observed in the real world. At the second level is the instrumental aspect that supports the descriptive aspect; if certain practises are carried out, then certain results will follow from this. At the core is then the normative aspect. The instrumental considerations of stakeholder theory ultimately rest on more than instrumental grounds; the foundation is often normative. Organisations benefit strategically from stakeholder management because it is perceived to be the right thing to do from a moral perspective; treating stakeholders as a means to an end is deemed as wrong (Sternberg, 1997). Jones (1995) argues that the strategic benefits of stakeholder management result from a genuine commitment to all stakeholders. Organisations that sustain relation-

ships with stakeholders based on trust and honesty have competitive advantages over organisations that do not do this, because it makes the organisation a desirable partner. If an organisation only applies stakeholder management for a strategic purpose, than commitments are in fact not really moral, and an organisation can then not reap the instrumental benefits from stakeholder management.

Stakeholder theory is nowadays often complemented by network theory (Beach et al., 2012; Roloff, 2008; Rowley, 1997). Network analysis or social network theory is the study of social structure in relation to the behaviour of individuals, groups or organisations. It has, understandably, been adopted in the context of stakeholder management, because organisations commonly deal with a number of stakeholders who may be interconnected as well. These connections between stakeholders may influence how the focal organisation responds to these stakeholders. Rowley (1997) theorises that the network density and the centrality of the focal organisation influence the behaviour of the focal organisation towards its stakeholders. Higher density of the network increases the ability of stakeholders to restrain the actions of the focal organisation, because they can more easily share information and form coalitions. Higher centrality increases the likelihood for the focal organisation to resist the pressures of stakeholders, because a central organisation will act as a broker and will be able to control and manipulate flows of information. Dependent on the level of density and centrality, focal organisations have to balance their own interests with those of the stakeholders, and will thus choose their strategy accordingly. Highly central organisations will take a commanding role when network density is low, but will have to compromise with stakeholders when density is high. Non-centralised focal organisations will have to subordinate when density is high, because they have no control over information flows. When density is low, the focal organisation has few links with the network, and can try to act solitary, as the potential reprisals are small.

Roloff (2008) uses network theory to put stakeholder management in a context of an issue-focussed approach to stakeholders.

She argues for an approach to stakeholder management that is based on a common issue the focal organisation has with its stakeholders. A network is built around an issue, in which the stakeholders and the focal organisation then take part to strive to come to a solution. We also see this idea more frequently in literature on project management (Achterkamp and Vos, 2008; Olander and Landin, 2005), which is basically about stakeholder management on a particular issue, such as a construction project. The social structure of stakeholders in the context of an issue like a project are likely to influence the behaviour of organisations (or their managers) towards stakeholders. As mentioned before, in dense networks stakeholders can form coalitions and exchange information, making themselves a larger threat to the project or organisation than if stakeholders could have been considered on their own.

Despite the relevant uses of network theory in stakeholder management, it is not a theory central in this thesis. An issue-focussed approach to stakeholder management would entail that stakeholder management does not occur, unless there is an issue. This does not seem to be fully in line with normative stakeholder theory. If all stakeholders have intrinsic value then a common issue is not the basis for stakeholder management; rather, the existence of the stakeholders is the basis for stakeholder management. Managing stakeholders, even when no specific issues are at hand, shows that the focal organisation is an approachable and trustworthy partner. Moreover, network theory tries to explain the relation between social structure and behaviour. It does not explain well what the focal organisation must do to satisfy stakeholders, as it seems to have limited influence over its behaviour. The *commander* and *solitary* behaviours suggested by Rowley (1997) also seem to relate more to the instrumental stakeholder theory (stakeholders as means to an end) than to a normative strategy. The focal organisation tries to do as it pleases to the extent that it can get away with it, manipulating information exchanges between stakeholders if it must. Throughout the chapters of this thesis, we will make some reference to network theory when it is considered relevant, but we take norma-

tive stakeholder theory as our core perspective to depart from. We believe normative stakeholder theory to hold an important basis, especially regarding stakeholder management in the public sector, as we will explain further below. As public organisations create public value and need legitimacy from the citizenry to do so, a normative approach to stakeholders where stakeholder satisfaction is the desired outcome is highly important.

1.2 Earlier research

A gap in the literature exists regarding stakeholder management in the public sector. The public and the private sector are to some extent similar, but there are some aspects that differ such that stakeholders are relatively more important for public sector organisations. Scholes and Johnson (2001) explain that managers in both the private and public sector try to turn resources into tangible or intangible assets. However, managers in the public sector are not only responsible for creating private value, but also public value. This more commonly means that they do not only take care of *outputs*, but also of *outcomes*. Citizens, for example, are probably more concerned with the incidence of crime (an outcome), than with the number of police patrols (an output). Because public value is consumed by the citizenry, rather than a paying customer, public organisations are subjected to the demands of a wide array of external stakeholders. Whereas we know much about stakeholder management in the private sector, much less work has been done on the public sector, while the external stakeholders are all the more important in helping public organisations to create value. This creation of value is also facilitated by resources that stakeholders offer to public organisations. Where private organisations typically (but not exclusively) use organisational capabilities that are controlled by managers, or that can be purchased, public organisations often have to resort to capabilities that come from outside of the organisation (Scholes and Johnson, 2001). Accomplishing the targets of a governmental programme can involve others than the focal or-

ganisation, such as clients or other public organisations. This is in line with the suggestion of Checkland (1981) that an owner of a problem should also be a co-owner in the development of a solution. We may consider for example, that a core task of the police is to catch burglars. The organisation might thus want to make sure that arrival times are good (to catch burglars in the act), or to have well trained staff for forensic analysis. Looking from a different perspective, the police might strive to minimise the risk of burglary for citizens. This calls for employing different capabilities, where others may also take a role. Police forces can make use of educational activities for citizens so that they, for example, do not write on social media when they are on vacation, thereby decreasing the risk of burglary. Governments can play a part by subsidising approved locks for doors and windows, or legally forcing the use of such locks on newly built homes.

Stakeholders provide not only money and co-production possibilities, but also legitimacy to public organisations, crucial to carrying out their tasks (Lasswell and Kaplan, 1950). Legitimacy is an input to the production function of many public organisations, and the police is a prime example. Resources such as manpower and technology are futile without a grant from the public to use force and authority (Moore and Trojanowicz, 1988). It causes people to make way for police sirens, and allows officers to put people in handcuffs or even to use a firearm against a citizen. All of these implications of being a public organisation have a significant meaning for the importance of stakeholders. The police is possibly one of the public organisations that needs the most legitimisation to execute its force and authority. Yet, we know less about stakeholder management in the public sector than the private sector, and the literature on interaction between police and its stakeholders is even scarcer.

The existing literature on stakeholders in policing often involve (case) studies of certain stakeholders. We find, for example, (case) studies on partnerships with certain stakeholders such as probation organisations (Corbett, 1998; Evans, 1997; Kim et al., 2010;

Murphy and Lutze, 2009; Murphy, 2008), schools (Brady et al., 2007; White et al., 2001), social work (Dean et al., 2000) and (mental) healthcare organisations (Hunter et al., 2005; Kisely et al., 2010). Second, there are also several studies on the relation between the police and citizens, whether this is about police-citizen violence (Alpert et al., 2004; Binder and Scharf, 1980; Kavanagh, 1997) or non-violent police-citizen encounters (Reisig and Chandek, 2001; Skogan, 2005; Tyler and Folger, 1980). Third, we find work on police-media relations, mainly in the context of handling this stakeholder well for the purpose of organisational legitimacy (e.g., Chermak and Weiss, 2005; Mawby, 1999, 2002).

Other literatures focus rather on certain stakeholder strategies. Collier et al. (2004) find that intelligence-led policing presents an opportunity to the police for communicating with various stakeholders. Simmons (2008) argues for the participation of stakeholders in the legal reform of law enforcement agencies, as the rules of the game for the police also influence the citizenry. He advocates a collaborative problem-solving approach to ensure the inclusion of all interested parties.

We also find a number of studies that discuss stakeholder perspectives on involvement with specific policing or security issues. We find work on how to involve stakeholders in process improvement in police forces (Greasley, 2004). Some have studied civilian control models for police integrity (Kaptein and Reenen, 2001; Prenzler, 2004; Prenzler et al., 2010). Donnermeyer (2002) asked both internal and external stakeholders how the police can better prepare itself for terrorism, and Greenberg (2007) did the same regarding the topic of campus security (in relation to the threat of school shootings).

There is a clear realisation in the literature that stakeholders are relevant for the police, but the focus is generally on the relation with a certain stakeholder, although some studies are about stakeholder mapping and the analysis of interests. There is lesser interest in the actual stakeholder management strategies themselves; why they work (or not), and how they can be improved. What ap-

pears to be missing in the literature on police stakeholders is a discussion of the optimal management strategies for different types of stakeholders. From a societal point of view, relevant research is needed that can teach both police organisations and stakeholders something about how stakeholders are managed by the police and what may be optimal solutions to stakeholder management. If stakeholder management is executed optimally by the police, then this is not only a win to the police itself, but also to the satisfied stakeholder. This would cover not only a broad range of organisations, but also the citizenry as a whole.

Furthermore, the existing literature mostly does not have a strong tie to stakeholder theory, and hence the focus is also not that much on the outcomes of normative stakeholder management, namely the satisfaction of stakeholders. This thesis attempts to (in part) close these gaps in the literature by providing a diverse perspective on stakeholder management in police organisations at both operational and strategic levels, while most literature focuses only on the tactical or strategic level. This operational aspect is highly important and relevant for an outward organisation as the police, as police professionals at many levels of the organisation deal with external stakeholders on a day-to-day basis, generally having the professional autonomy to choose how to deal with them. In other organisations, stakeholder management is either limited to specific individuals, or management of stakeholders has been laid down strictly in protocols that only senior professionals can break (in exceptional cases).

1.3 The current study

In this thesis we take the a normative approach to stakeholder theory as our stepping stone, but do not ignore the potential instrumental benefits that may arise from stakeholder management. We assume that police organisations need to manage all stakeholders well, in order to be a trustworthy and legitimate organisation. As resources from outside the police organisation can be impor-

tant for reaching either outputs or outcomes, we see an instrumental potential for stakeholder management, but recognise that there may not be an overall relation between stakeholder management and organisational performance. Not all stakeholder management is likely to be strategic. The question is then how to measure performance. Normative stakeholder theory suggests that the satisfaction of stakeholders is what organisations may strive for, because stakeholders should be managed out of moral and societal reasons. If stakeholders are pleased, they can build steady and valuable relations with the focal organisation. Especially for public organisations this argument of intrinsically valuable stakeholders makes sense. Scholes and Johnson (2011) claim that, at the strategic level, managers seek to define the organisation's mission in terms of maximising the value to stakeholders.

In work by van den Born and van Witteloostuijn (2011), on which we build some of our research, police interviewees were asked how they deal with the stakeholders they mentioned. This revealed that stakeholders are managed by police forces in many different ways. This ranges from intense collaboration to bluntly ignoring their demands. The variety within forces is also enormous, as it is often left to the discretion of police officers individually how they deal with external parties. Only towards few stakeholders do police forces have a unified approach, and that approach is most likely due to the fact that only few persons within the police force deal with this stakeholder. For example, only high-ranked police officials have to interact with ministers from the national government. Yet, we do not feel that having different approaches to stakeholders is necessarily a bad thing. In fact, it is likely to be a strength for police organisations to allow for varied stakeholder management at different levels of the organisation. One stakeholder can have many different interests depending on the issue, the location, or the level/type of police that they deal with. Let us take citizens as an example. It is a different stakeholder at the tactical level of the organisation, basing strategy on general interest of the citizens as a whole, *vis-à-vis* the police officer on the street, who deals with them

as a community or as individuals. They are also a different stakeholder to the detective than to the community officer. The detective might only deal with them as a source of information in a criminal case. To the community officer they are perhaps the most important stakeholder, collaborating with them daily to make the neighbourhood a safer place. Yet, the community officer in a high-income neighbourhood may manage citizens differently, for example by informing them on burglary prevention, than the community officer in an impoverished neighbourhood, who might have to reach out to drug abusers or troubled youth.

The study by van den Born and van Witteloostuijn (2011) shows that the management of a stakeholder will often be influenced, or determined, by police officers at different levels of the organisation, as individuals or in teams. What a 'good' (i.e., satisfactory for the stakeholder) management strategy entails will hinge on the interests of that stakeholder and how influential a stakeholder is. A (originally corporate) theory of stakeholder mapping and management we use is that of Savage et al. (1991), which basically argues that the management method a focal organisation chooses should be based on the dependence relationship it has with its stakeholders. High influence combined with big interests, such as a police force may have in a relation with a public prosecution office, will generally lead to close cooperation in order for the stakeholder to be satisfied, and possibly improve some joint measure of performance. Little influence and few (or non-existing) interests justifies mere monitoring of stakeholders. High influence/low interest or low influence/high interest relations ask for yet other methods. By all means, we do not intend to state that stakeholders can be statically categorised, and consequently left to their appropriate management methods. Different stakeholders need different management methods, and depending on the time and place, management methods may also need to differ or be adapted. Some schools, for example, like to see close involvement of the police, while others are perfectly fine without assistance. In one period, the police may decide to work intensely with the tax agency on cases of fraud or

tax evasion, while in other times they work on such cases independently.

The idea is that using the right stakeholder management method at the right time will be positive for the performance in terms of satisfying the stakeholder's expectations. This is a claim that we examine in Chapter 2. In Chapter 2, we do a stakeholder management analysis of police forces in seven European countries to find out if managing stakeholders (theoretically) appropriately in relation to their stakeholder type will increase performance on the stakeholders' expectations. For this, we create a typology based on stakeholder management quadrants by Savage et al. (1991) and Scholes and Johnson (2001). Next to this, we argue that actively managing stakeholders will always have a positive influence on their expectations, as blindly ignoring them or window-dressing activities may cause stakeholders to feel they have no input whatsoever. Lastly, we argue that stakeholders whose expectations are difficult to manage for whatever reason will be negatively associated with performance on stakeholders' expectations, even when management is active and the method is correct. We use data from interviews with police professionals on environmental threats and external stakeholders, and perform OLS analyses to answer our first research question.

Research question 1. *How is the use of management strategies with certain stakeholder types associated with the police's perceived performance on stakeholders' expectations?*

As will become clear from Chapter 2, a lot of the stakeholder management that police forces do (and should do) is collaborate with stakeholders. Collaboration is not only what leads to satisfied stakeholders in specified cases, it can also be necessary to get jobs done that go beyond the abilities, specialties or mandates of police organisations. An obvious example is the collaboration with the public prosecution. A criminal cannot be convicted by the police itself, yet the prosecution would have no criminal case to begin with if it was not for the police. There are other examples

that are perhaps less obvious, but not less relevant. The collaboration between police and social or (mental) healthcare problems is increasingly becoming an established method to tackle offenders who also have social or health-related problems. In Chapters 3 and 4, we look at cooperation between police officers and professionals from other public organisations when it comes to such complex problem-solving tasks. Specifically, we have looked at professionals working in a special type of teams that we have defined as Public Interdisciplinary Interagency (PII) teams. In Chapter 3, we focus on what kind of people collaborate well in such circumstances, and how that influences the perceived collaboration and performance of the joint effort. In Chapter 4, we investigate which structural characteristics can be offered by a Network Administrative Organisation (NAO) to such interdisciplinary partnerships to facilitate cooperation. A NAO is an independent body commonly participating in interdisciplinary networks for administrative purposes, but which can also be used for offering collaborative structural characteristics to participants. For these studies, we collected our own data by means of surveys in the Netherlands. We use several statistical methods to analyse the data to explore our second and third research questions.

Research question 2. *How are the characteristics of individuals working in a public interdisciplinary interorganisational team associated with how these individuals perceive their collaboration and team performance?*¹

Research question 3. *When the characteristics of the professionals and the organisations are given, what can Network Administrative Organisations offer in terms of structure to improve cooperation in these teams?*

Chapter 5 is a methodological contribution regarding differences in performance perception, which follows from our continuous struggle with performance measures throughout our studies, as is typical for much research involving public organisations. It

¹This refers to characteristics of the individual that are either inherent to the individual, or are provided to individuals by their home organisations.

comes as both a warning to researchers and police organisations alike that performance may be differently perceived, not only between internals and externals, but also differently in different occupational groups. In Chapter 5, we introduce an existing tool to the field of public management to see who is biased and/or unknowing when asking internals and externals about police performance. We use data from the European Social Survey and put a multi-trait-multi-method (MTMM) model to work to find an answer to our fourth research question.

Research question 4. *How are MTMM models useful in showing bias in perceived performance of policing in Europe?*

In Chapter 6, we briefly summarise the findings of this thesis. Next to the general findings, we discuss the weaknesses of our research and suggest a future research agenda. Chapters 2 to 5 have been written as independent research papers: Although they are related (especially Chapters 3 and 4), the papers stand alone. This means that the reader can choose to read these chapters separately. No information will be missed by skipping chapters or reading them in random order. We must add that the chapters may inevitably contain some overlap, particularly Chapters 3 and 4, but overall the literature and methodology is quite diverse.

In Figure 1.1, we provide an overview of the contents and contributions of this thesis. There are three themes: the general management of stakeholders, collaboration as a management strategy toward stakeholders, and performance measurement. Chapter 2 falls under the first theme, Chapters 3 and 4 under the second theme, and finally Chapter 5 under the third theme. Depending on the themes and the research questions, the conceptual, methodological and empirical contributions vary in weight. Initially, our interest is to investigate which stakeholders are out there and whether they are appropriately managed, according to stakeholder management literature. Hence, the contribution in Chapter 2 is mainly empirical. Firstly, it adds to the relatively scarce number of empirical 'fit' studies; and, secondly, it is (to the best of our knowl-

edge) the first study that investigates the relation between the police and their overall stakeholder environment, instead of just one or a few stakeholders.

Having found collaboration to be a frequently used stakeholder management strategy in police organisations, we question how collaboration could be optimised between the police and its stakeholders. The theoretical and empirical literature about collaboration between organisations is plentiful, but we found it not to be fully applicable to this context. Most of the scientific literature relates to for-profit organisations that work together with organisations in similar industries to create profitable products or services. What happens when public organisations from different disciplines try to tackle (possibly non-profitable) problems together? Literature on public networks provides some information on this, but fails to answer a number of questions. Does it take a certain type of professional to collaborate well, or potentially some kind of structural characteristics in the environment? Because the existing literature does not fit with this context very well, we introduce the concept of Public Interdisciplinary Interorganisational (PII) teams. We have argued that the existing literature on interdisciplinary collaboration and teams will fit with the PII context best, and will hence help in generating hypotheses. Yet, we also create hypotheses that were not in line with existing team literature, because we believe the PII context to require a focus on other characteristics. We contribute to the empirical literature by being the first (to the best of our knowledge) to study these PII teams as such, although some case studies exist on interdisciplinary collaboration involving the police (e.g. Abram et al., 2005; Bronstein and Wright, 2007; Cole and Logan, 2008; Maschi and Killian, 2011). We suggest in these studies that there are associations between competent people and a supportive environment on the one hand and perceived success in this difficult type of collaboration on the other hand.

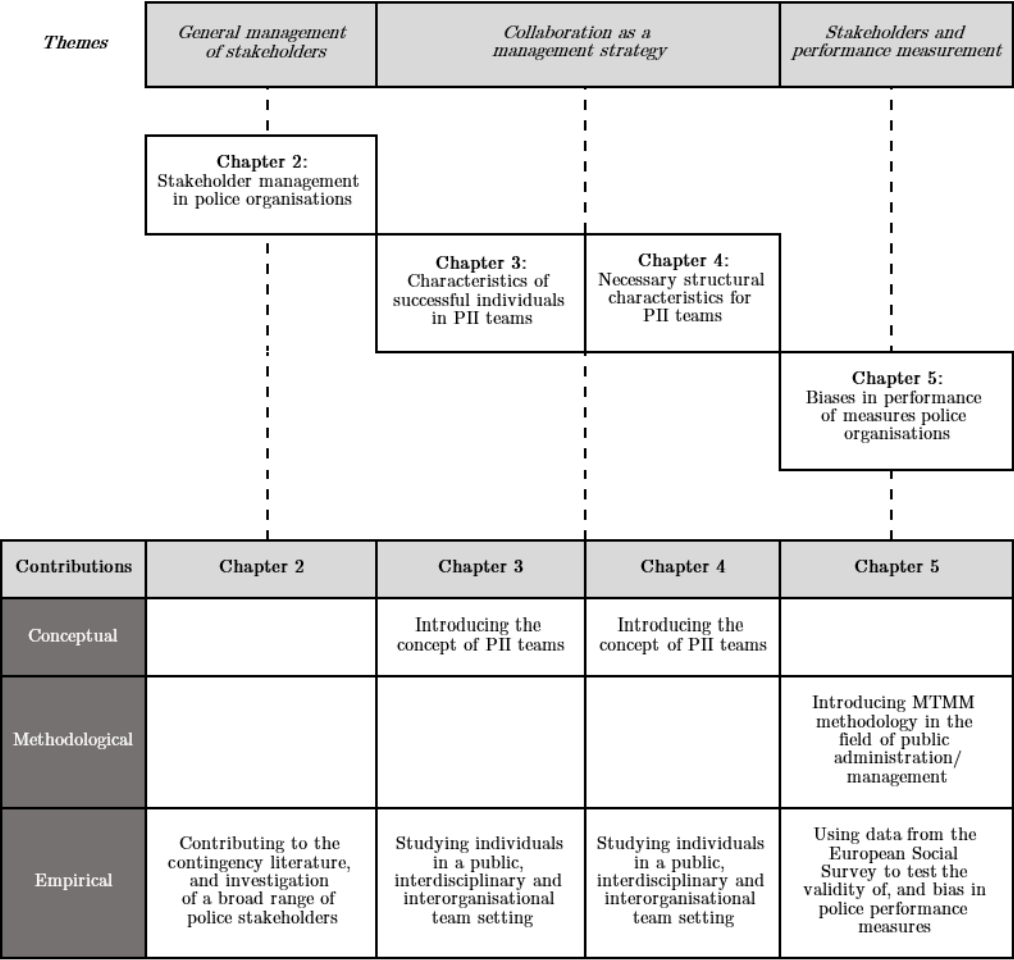
A returning complicated issue in our research is how to measure stakeholder satisfaction or (perceived) performance, as we have tried to measure it in one way or the other in all studies.

Hence this is the final theme under discussion in this thesis. In the era of New Public Management, which has a strong focus on performance measurement, it proves to be a daunting task to find good performance measures. Especially in the public sector, where quantitative measures are not always appropriate or relevant to all stakeholders, organisations may find themselves reliant on biased perceptions of internal and external stakeholders. In Chapter 5, we contribute methodologically by introducing an existing model to the field of public administration to aid (scientific) researchers in identifying bias amongst respondents.

1.4 COMPOSITE (Comparative Police Studies in the EU)

The studies in this PhD thesis were financed by COMPOSITE, through the FP 7 Framework Programme of the European Union. COMPOSITE does comparative research on police organisations in ten European countries. The research focus of COMPOSITE is very much on change and change management. Let it be clear up front that this thesis is not about change or about stakeholder management in change processes. Nevertheless, stakeholders analysis and management is a relevant aspect to study in this context, as stakeholders form an important part of the environment to which policing organisations need to stay fit. Knowing who the key stakeholders are and how to manage them may improve the predictability of the environment. Although some environmental changes are difficult to influence as an organisation, many changes are brought about by relatively close stakeholders. Political and legal changes are, for example, often initiated by politicians and national/local governments. They are usually the ones who determine performance measures for police forces, and who influence priorities. A change in the political landscape can mean that police forces have to cut costs, reorganise or (re)centralise, especially in the face of economic downturn.

Figure 1.1: Integrated overview and contributions of this thesis



Chapter 2

Stakeholder management in European police organisations*

The one who loves the least, controls the relationship.[†]

Abstract

This chapter examines the concept of fit between external stakeholder types and management methods in relation to perceived performance on stakeholders' expectations. We classify external stakeholders as marginal, non-supportive, supportive or mixed-blessing, with the respective fitting management methods being monitoring, defence, involvement or collaboration strategies. We find that fit between stakeholder type and management method is positively associated with performance on stakeholders' expectations in fourteen police organisations across seven European countries. Additionally, we include active management of and difficulty to manage stakeholders' expectations, and find that the first is positively and the second negatively associated with perceived performance on stakeholders' expectations.

*This chapter is the result of joint work with Arjen van Witteloostuijn and Arjan van den Born.

[†]Dr. Robert Anthony, behavioural psychologist.

2.1 Introduction

In the introductory chapter, we already mentioned a number of the police's stakeholders, but other examples are abound. In the border regions of Belgium, Germany and the Netherlands, Belgian, German and Dutch police officers go on patrols together. In the UK, the police outsource the closing down of shady businesses to health and labour inspection teams. In the Netherlands, the police work with housing corporations and energy suppliers to trace down marijuana plantations. These are just a couple of examples where the police actively manage stakeholders. Yet, the long list of all the different parties involved in solving crime, such as the public prosecutors, forensic laboratories, victims, witnesses, and suspects, already indicates that dealing with other stakeholders is the rule rather than the exception in modern policing.

In modern democracies, there are numerous external stakeholders with whom the police have to deal, be it voluntarily or by force of law. On the one hand, more than ever, police organisations need other external parties to respond adequately to the increased demand from citizens, growing sophistication of societies, and new forms of criminality. On the other hand, the police need legitimacy from the citizenry to operate, which requires satisfactory performance in the eyes of a broad range of stakeholders. All in all, the police must effectively manage all their external stakeholders. This observation may seem obvious and logical, if not an exercise in forcing an open door, but a systematic, structural and well thought-through approach to managing stakeholders is missing in many police organisations (van den Born and van Witteloostuijn, 2011).

In the academic management literature, stakeholders have been defined by Freeman (1984) as any group or individual who can affect or is affected by the achievement of the focal organisation's objectives. Since the publication of his influential work *Strategic Management: A stakeholder approach* (1984), Freeman has released a discussion about who or what really counts in stakeholder management. However, to date, no agreement has been reached about

how to deal with stakeholders, neither in academia nor in practice (Freeman et al., 2010). Prior scholarly work on stakeholder management strategies is primarily theoretical in nature or reports findings from case studies (Blair et al., 1996; Frooman, 1999; Savage et al., 1991). Stakeholder theories have also been applied in the field of public administration (Beach et al., 2012; Foo et al., 2011; Gomes et al., 2010; Gomes and de Oliveira Miranda Gomes, 2008). Evidence of a significant relationship between using "correct" management strategies, on the one hand, and performance on stakeholders' expectations, on the other hand, is lacking, though. The present study describes a first attempt to provide systematic evidence through statistical analyses.

Specifically, the current study investigates the relationship of fourteen European police forces from seven countries with their external stakeholders, and analyses how fit between external stakeholders and management strategies is related to the performance on the expectations of stakeholders, answering the following research question:

How is the use of management strategies with certain stakeholder types associated with the police's perceived performance on stakeholders' expectations?

The basis of our theoretical framework is twofold, namely stakeholder theory and contingency theory. With this research, this chapter strives to contribute to the academic literature in two ways. Firstly, our study adds a multivariate model of fit to the empirical contingency theory literature, which is relatively small compared to the theoretical work done in this field. Secondly, our study focuses on an important organisational form in the public domain: police forces. We argue that a combined instrumental and normative perspective on stakeholder theory is the best approach to this organisation, particularly as the police can benefit from access to resources from stakeholders, on the one hand, to function well, but needs, on the other hand, (more than other public organisations) legitimisation from its stakeholders in order to use force and au-

thority. This implies that the police thus cannot purely execute a "pure" variant of strategic stakeholder management.

Here, we face a challenge in the domain of performance measurement, as we, in line with normative stakeholder theory, desire to measure the satisfaction or perception of the stakeholder. We have to develop tailor-made proxies, specific for the organisational form at hand: police forces. In the current study, we decided to work with assessment scores of informed respondents from the police as to how they evaluate their police forces' performance in meeting specific external stakeholder's expectations. This approach to performance measurement is another contribution of our study, being in line with the normative aspects of stakeholder theory, but yet not commonly applied in empirical studies as a performance measure.

This chapter is structured as follows. First, we present a literature review in Section 2.2, where we also explain our theory. Our empirical methodology is introduced in Section 2.3, and the empirical evidence is provided in Section 2.4. Finally, in Section 2.5, we will reflect on what our study contributes to the literature, and what our evidence reveals about stakeholder management practices in our fourteen European police forces.

2.2 Literature review

2.2.1 Stakeholder theory

The idea that corporations have stakeholders has been well accepted in the management literature for a few decades, especially since Freeman's 1984 book *Strategic Management: A Stakeholder Approach* (Donaldson and Grant-Vallone, 2002). Stakeholder theory has been described as descriptive, instrumental and normative. Descriptive stakeholder theory formulates a model of the firm to explain specific characteristics and behaviours. Instrumental theory provides justification for stakeholder theory based on the idea that the link between stakeholder management and organisational

performance should be examined. One of the central arguments from the normative realm is that organisations should tend to all stakeholders, not just their own. It prescribes how all stakeholders should be treated on the basis of some underlying moral or philosophical principles.

The idea that stakeholder management and performance go hand in hand is well accepted in the management literature. A bulk of the literature on stakeholder management (implicitly) relates to the instrumental perspective on stakeholders (Jawahar and McLaughlin, 2001). From a stakeholder-agency perspective, one argument is that stakeholders can monitor managers and use enforcement mechanisms to curb their opportunistic behaviour (Hill and Jones, 1992). Another argument is that of resource dependency theory. The notion that organisations cannot operate independently from their environment originally has its roots in sociology (Weber, 1947). In this tradition, Pfeffer and Salancik (1978) developed a framework of resource control, giving centre stage to a power struggle amongst organisations, which goes by the name of resource dependence theory. This theory characterises the organisation as an open system, dependent for its resources on contingencies in the external environment (Pfeffer and Salancik, 1978). In an environment of scarce resources that are controlled by different organisations, resource acquisition is critical, but uncertain. To reduce uncertainty, organisations will develop coalitions with resource-providing external parties to influence and control the latter's behaviour. Scholes and Johnson (2001) emphasise the argument of resource dependence in public sector industries, as these are more likely to reach out to stakeholders for resources. This in contrast with private corporations, which typically (but certainly not always) already control resources or can buy them with financial means.

From the field or institutional theory, already quite some things have been written about organisations and their environment, also for the public sector in particular, that would support a more instrumental approach to stakeholder management, as organisations

strive for greater organisational autonomy. Boin (2001) explains that institutions create a buffer against the environment by creating a degree of autonomy, but that public organisations are subject to at least a degree of minimal control. The institutional elite can influence the degree of autonomy by building and maintaining support for their programs and activities. Police organisations are in particular very dependent on the democratic environment, as priorities can be set by politicians from day to day, especially when local governance has an influence. There are different strategies to create more organisational autonomy, and hence have more influence over the organisation's preferred means, and perhaps even the goals.

First, one strategy is for organisations to create a favourable identity. Agency myth, or the idea that the organisation's goals are basically impossible to achieve (Hargrove and Glidewell, 1990), is a good strategy for building autonomy. As there is always an understanding of a certain discrepancy between what is desired and what is eventually achieved, the environment assumes that the organisation has laudable intentions and does not have expectations equal to the performance goals. Second, co-optation could be another strategy. Usually this is aimed at silencing (potential) critics by taking them on board and involving them in strategy or decision making processes (Selznick, 1949). By hearing and tending to the concerns of stakeholders, organisations find it easier to deal with opposition to their plans. Third, public organisations must show desirable core values to the public. They should always emphasise their frugality, because greedy public organisations are under critique and scrutiny by the public. They should not openly attack other (public) organisations. They should be transparent, in line with the publicity principle; information has to be accessible to the citizenry. If information cannot be given to the public, then this has to be because of a good reason, such as privacy or public safety. In any case, the public organisation reaches more autonomy the easiest when they attract the least attention (Boin, 2001). Furthermore, public organisations may also benefit from showing their manage-

rial competences to the public.

Network theory and social network analysis is another stream of literature commonly associated with stakeholder management. Network theory seeks to explain how social structures influence the behaviour of individuals, groups or organisations. Network theory is an interesting approach that is often used in stakeholder management research regarding project management for example, in the construction sector. Project managers need to know who the stakeholders are, what their interests are and how much of a threat they are to the project. Here network analysis becomes important, because stakeholders who by themselves do not have that much influence can form coalitions with stakeholders from their network and suddenly become a threat. Because this study is about stakeholder management in general, network theory is not as applicable here as it would be in a project management (case) study. Furthermore, network theory often (implicitly) assumes stakeholder management as an instrument to obtain better performance. For instance, Rowley (1997) theorises that a focal organisation will manipulate information flows between stakeholders if it has a central (broker) position in the network. When the network is not dense enough for stakeholders to form coalitions, the focal organisation will take a commander strategy, attempting to control stakeholder behaviours and expectations.

Although the bulk of research on stakeholder management is (implicitly) based on an instrumental perspective, there is no structural or compelling evidence that strategic stakeholder management is the optimal strategy for maximising conventional performance measures of for-profit firms (Donaldson and Grant-Vallone, 2002; Jawahar and McLaughlin, 2001; Parmar et al., 2010). This is attributed by Jawahar and McLaughlin (2001) to the developmental stages of organisations, and argue that different stakeholder management strategies will be employed by organisations, depending on their stability. Organisations should take more risks with stakeholders when they just start, or face financial downturn, and less risks when they grow or are mature. This means that in the for-

mer case, organisations should only manage their most important stakeholders well, and defend against the others, in contrast, in the latter situation, organisations try to treat all stakeholders well, because they do not want to (or have to) take any risks by treating them badly. This theory is however difficult to employ in the public sector, as most public organisations are mature, which is certainly the case for police organisations.

Donaldson and Grant-Vallone (2002) rather explain the lack of a relationship between strategic stakeholder management and overall organisational performance with reference to normative stakeholder theory. They claim that the instrumental considerations of stakeholder theory ultimately rest on more than instrumental grounds; the foundation is often normative. Organisations benefit strategically from stakeholder management because it is perceived to be the right thing to do from a moral perspective. Jones (1995) argues that the strategic benefits of stakeholder management result from a genuine commitment to all stakeholders. Organisations that sustain relationships with stakeholders based on trust and honesty have competitive advantages over organisations that do not do this, because it makes the organisation a desirable partner. If an organisation only applies stakeholder management for a strategic purpose, then commitments are in fact not really moral, and organisations can then not reap the instrumental benefits from stakeholder management. We find this theory highly applicable to the public sector, firstly from the resource dependence theory. If public organisations commonly have to reach out to a variety of stakeholders to achieve a goal, then it is important to be recognised as a trustworthy partner. Secondly, the societal and moral motivation of stakeholder management (the idea that managing stakeholders is the right thing to do) is crucial for the legitimacy of any public organisation. Legitimacy in turn is necessary for the operation of the public firm (Scholes and Johnson, 2001), perhaps foremost for an organisation that uses force and authority against the public.

As there might not be a clear direct link between stakeholder

management and overall performance of an organisation, we would argue that it is rather the satisfaction of stakeholders that one would like to measure. Scholes and Johnson (2001) state that performance on the expectations of stakeholders is indeed what managers try to maximise, because it is so crucial from both a resource and a legitimacy perspective.

Because organisations will not profit from strategic stakeholder management that is, from managing only those stakeholders that can benefit the organisation, but rather have to manage all stakeholders, it is important for organisations to know who their stakeholders actually are. Stakeholder management can be costly. Managing some stakeholders can be more beneficial for the stakeholder than the focal organisation. Organisations want to know what kind of stakeholders they are dealing with, and create some sort of categorisation. The primary issue is how to keep all stakeholders satisfied, but preferably by managing them in manners most suitable for that stakeholder. These are issues with which the literature on stakeholder mapping and management strategies is concerned.

Frooman (1999) outlines that next to mapping external parties and their demands, a third important issue is the choice of the management methods that organisations employ to influence and satisfy their stakeholders' demands, which he calls stakeholder influence strategies. The need for these stakeholder influence strategies is based on the assumption that there will be conflicting demands between organisations and stakeholders. After all, if the organisation and all its stakeholders were largely in agreement, managers would have no need to concern themselves with stakeholder influence strategies. Joldersma and Winter (2002) explain that stakeholder influence - or management - strategies are likely to be dependent on the type of organisation. Governmental organisations make strategic decisions through formal bureaucratic structures, with little control over external factors. Because of the limited power that these organisations have, they are more inclined to use indirect styles of stakeholder management, such as consultation, participation and facilitation. In contrast, organisations with

more influence on their strategies and environment, such as private organisations, are expected to use more direct management styles, like negotiation, bargaining and cooperation. Although this is an interesting argument, it may not hold for police organisations. Though the police may be a large bureaucratic organisation when it comes to strategy making, in terms of stakeholder management much more flexibility can be expected. This is because policing professionals receive much more autonomy than the average public servant. Plenty of the stakeholder management will be done at the level of individual officers, or squads, rather than at the level of the organisation.

Wartick and Cochran (1985) outline management strategies with a focus on (legal) responsibilities, using the terms *reactive*, *defensive*, *accommodative* and *proactive*. Being proactive means to take responsibility, accommodation to accept responsibility, defence to admit responsibility and reaction to deny responsibility. The general argument around all these management strategies is that more is better, as we also see in empirical studies (e.g., Mishra and Suar, 2010; Tetřevová and Sabolová, 2010). Stakeholders will prefer organisations to go beyond their responsibilities rather than to deny them. As resources are limited, stakeholders will have to be prioritised for example, based on their salience, power and legitimacy (Mitchell et al., 1997). This stream of literature may be valid for some fields of research, such as Corporate Social Responsibility, where more is probably always appreciated by the involved stakeholders. It might not be as relevant for the day-to-day business of a police force. The marginal return on an extra unit of satisfaction of a stakeholder may be quite low in some cases, as the police goes further beyond its responsibilities. A school, for example, will probably want the police to accept responsibilities, might appreciate it when the police send an officer over for a presentation for the children, but may be reluctant to have more contact than that. As we have no reason to assume that it is always worthwhile for the police to do as much as possible, we turn to a stream of literature that combines stakeholder mapping with appropriate management strategies.

Stakeholder mapping can be achieved in numerous ways according to the literature, but not all stakeholder grids have been complemented with stakeholder management strategies. Stakeholder mapping by Mitchell et al. (1997), for example, is done on the basis of urgency, power and legitimacy, and explains to managers which stakeholders they should prioritise. Mendelow (1991) places stakeholders in a power/dynamism grid, where power relates to the influence that a stakeholder can exert over the focal organisation, and dynamism, as is commonly done, being measured by the predictability of the stakeholder's expectations. Again, this grid only explains which stakeholders are potentially hazardous. Johnson et al. (2008) adapt this grid to a power/interest one and propose some appropriate management strategies for different types of stakeholders (see Table 2.1). Stakeholders that have little power and little interest (A) should receive minimal effort, because they are neither interested nor a threat. Stakeholders that have little power but high interest (B) should be kept informed. Johnson et al. (2008) argue that these stakeholders can be (come) important 'allies' to influence the attitudes of more powerful stakeholders. High power, low interest stakeholders (C) should be kept satisfied, which may seem much effort for a passive stakeholder, but it decreases the risk of the stakeholder becoming a problem if he/she decides to increase the level of interest. Lastly, stakeholders with high interest and power (D) are the key players, who can frustrate the work, strategies and goals of the focal organisation, but no clear strategy is provided to deal with them.

The typology of Johnson et al. (2008) is well adopted in the more recent stakeholder literature. It is also found to be a suitable stakeholder grid for analysing stakeholders in the public sector (Scholes and Johnson, 2001). Johnson et al. (2008) themselves explain this typology in terms of strategy development. It is not surprising that we often see it appear in the stream of literature that concerns project management, especially in management of construction projects (Chinyio and Olomolaiye, 2009; Olander and Landin,

Table 2.1: Typology as defined by Johnson et al. (2008)

		Level of interest of stakeholder	
		Low	High
Power of stakeholder	Low	A Minimal effort	B Keep informed
	High	C Keep satisfied	D Key players

2005; Yang et al., 2011). The management strategies discussed here are probably more suitable for short-term stakeholder management in case of change or a project, rather than for the daily operations.

Savage et al. (1991) look at the stakeholder management methods from the perspective of the focal organisation from a daily operations perspective. They map the stakeholders of an airline company, and assess their potential threats to the focal organisation and their willingness to cooperate. This is much in line with other literature on stakeholder management (van der Laan Smith et al., 2005; Smith et al., 1994). Hostility or threat is a key variable in the expansive literature on the organisation-environment-strategy relationship (Miller and Friesen, 1978). Cooperation is relevant because this may lead to organisations joining forces with other stakeholders, resulting in better management of organisational environments. Savage et al. (1991) report that the type of relationship with a stakeholder *x* influences the management method that the organisation should employ *vis-à-vis* this stakeholder *x*. They suggest a typology of relationships with matching management strategies, as shown in Table 2.2.

Low-threat stakeholders are either supportive or marginal. Supportive stakeholders should be explicitly involved in the focal organisation to raise the potential performance of the latter. Savage et al. (1991) mention that these stakeholders are often overlooked, because they are of little threat to the focal organisation. As a re-

Table 2.2: Typology as defined by Savage et al. (1991)

		Stakeholder's potential threat to the focal organisation	
		Low	High
Stakeholder's potential for cooperation with the focal organisation	Low	Marginal stakeholders: Monitor	Non-supportive stakeholders: Defend
	High	Supportive stakeholders: Involve	Mixed-blessing stakeholders: Collaborate

sult, the fact that their involvement can increase performance is often ignored. Although involvement takes constant effort, the focal organisation can relate to these stakeholders by implementing participative management techniques, increasing decision-making involvement of these stakeholders (Savage et al., 1991).

Marginal stakeholders are those of little potential threat and with low willingness to cooperate. Putting much effort into relationships with these stakeholders is generally a waste of resources. Only if issues salient to these stakeholders are concerned, management should act accordingly by investing in these relationships; otherwise, monitoring is the most efficient strategy. An organisation could, for example, enlarge the board of non-executive directors with representatives of these stakeholders - not for them to influence the decision-making processes per se, but rather to be aware of the importance of particular issues for these stakeholders.

Non-supportive stakeholders are of high potential threat and with little potential for cooperation. They are generally the most distressing to a focal organisation. The best method of dealing with them is a defensive strategy. Defensive strategies are aimed at reducing the dependence that forms the basis for the stakeholder's interest in the focal organisation (Kotter, 1979). They include many traditional marketing and strategic tactics as designed for handling competitors. Savage et al. (1991) give the example of how airline companies voluntarily cut back flights when US air traffic controllers were striking, rather than waiting for the Federal Aviation Agency to regulate this. Organisations can also launch PR campaigns to improve the relationship with these stakeholders.

The mixed-blessing stakeholder is not only a potential threat, but also potentially cooperative. Collaboration with these stakeholders is the first-best stakeholder management strategy. By maximising collaboration, these stakeholders will find it increasingly more difficult to oppose the focal organisation. Joint ventures are a well-known example of such a collaborative strategy: if you cannot beat them, join them.

Though different from one another, we find similarities between different stakeholder mappings and management strategies. Chinyio and Olomolaiye (2009) also recognise that many different stakeholder mappings exist, some also developed by governments and consultancy firms, but that there are some key variables that underlie most of them. Commonly stakeholder mappings use power, support, influence, interest and attitude. There is not a golden rule for stakeholder mapping, such that we may take some freedom to develop one of our own. On the one hand, we take a measure of power and one of interest, in line with Scholes and Johnson (2001), as this framework has been accepted for use in the public sector. On the other hand, we decided to take management strategies from Savage et al. (1991), as these are better applicable for stakeholder management in daily operations. Blair et al. (1996) have also used the typology of Savage et al. (1991) in a public sector study, such that we may expect that the strategies suggested by Savage et al. (1991) are also acceptable for the public sector. Our typology is summarised in Table 2.3. Rather than looking at the potential to cooperate, we look at which interests stakeholders have. We replace potential threat with another measure of stakeholder power, namely the influence that stakeholders have. We believe that the management strategies outlined by Scholes and Johnson (2001) are in fact not so far from those offered by Savage et al. (1991), but just better applicable to daily operations instead of project management. Organisations monitor vs. minimise effort, they involve vs. keep informed, they collaborate with key players, and defend vs. keep satisfied. Defending can imply keeping a

Table 2.3: Our typology based on Scholes and Johnson (2001) and Savage et al. (1991)

		Influence of the stakeholder on the police	
		Low	High
Interest of the stakeholder in the police	Low	Marginal stakeholders (e.g., schools) Strategy: Monitor	Non-supportive stakeholders (e.g., media) Strategy: Defend
	High	Supportive stakeholders (e.g., sport event organisers) Strategy: Involve	Mixed-blessing stakeholders (e.g., public prosecution) Strategy: Collaborate

stakeholder satisfied, but may also mean the opposite.

Of course, it is hardly possible to classify stakeholders into fixed categories for every police force and over time. A stakeholder may be more influential or have different interests for one police force than for another (or even within a police force), and their positions may change over time as well. For a community police officer, a school may be a mixed-blessing stakeholder, if he/she sees that kids are dropping out and are resorting to crime. This might even call for a collaborative effort. For a detective, schools may be marginal stakeholders most of the time, and he/she will only interact with the school in case of a criminal investigation at a school or in relation to its students. Depending on the police officer, unit or department, different strategies may be employed towards a stakeholder such as citizens. In some communities, monitoring may be a sufficient strategy, while in other cases police officers might want to involve citizens in making their environment safer and prevent specific crimes like burglary. One can imagine situations where police work together with citizens, when human resources of the police are not necessary or sufficient. An example may be neighbourhood watches, or organised search efforts for missing persons. However, by way of illustration, below we add examples relevant in our police force setting as to how certain stakeholders may be perceived and treated in a given context.

As the police are not highly influenced by supportive stakeholders, the appropriate management method is involvement of

such stakeholders. Sport event organisers may be exemplary of supportive stakeholders, for instance in cases where they are dependent on police forces for delivering security units at soccer games. Public prosecution services may be a good example of a mixed-blessing stakeholder: they are usually dependent on the police, but also very influential. Failure to cooperate may also have a strong negative impact on the performance of both organisations. The media could be an example of a stakeholder that is not very dependent on the police for their own performance; after all, they have plenty of other issues to report on, and other sources to consult. The media is, however, very influential as they can make or break the police's reputation. Such non-supportive stakeholders require a defensive strategy. Low dependence of a stakeholder on the police, such as can be the case with schools, will not motivate cooperation, as low-dependence stakeholders exert little influence on the police. When a school and the police operate perfectly fine independently, but decide to come together in the context of specific issues, such as the prevention of drug trading, then the school can be considered a marginal stakeholder. Monitoring these marginal stakeholders would be sufficient for dealing with such relationships.

2.2.2 Contingency theory

A next step is to link our stakeholder typology with actual stakeholder management strategies, such that we may assume that there is a 'fit' between a stakeholder and a certain management method. The relationship between environment and strategy has been extensively analysed in the fit literature in management studies. In this section, we focus on the stream of work that evaluates the effect of specific strategies in specific contexts on a specific organisation's performance. This has been the focus of the so-called formulation school in the field of strategic management, a well-known contribution being Porter's (1998) framework for competition analysis and competitive strategy (Heijltjes and van Witteloostuijn, 2003). The key argument here is that specific strategies of specific organi-

sations fit with specific contexts.

The notion of fit - or, alternatively, alignment, congruence or match - has been very popular in management studies ever since the classic contingency-theoretic studies of the 1960s (Parker and van Witteloostuijn, 2010). The argument is that complementarities ('fits') across organisational features could benefit organisations such that performance is enhanced to above-normal levels (Milgrom and Roberts, 1995). It logically follows that fits will yield better performance than misfits (Doty et al., 1993). Misfit and fit are complementary concepts; each implicitly implies the other (Burton et al., 2002). Misfits might have a significantly negative effect on performance, however; alternatively, misfits may not have any effect at all. Burton et al. (2002) refer to performance-decreasing misfits as 'extreme misfits'.

Based on these 'fit' arguments, we will develop a multidimensional model that analyses the relationship of stakeholder types and management methods, or strategies, and the effect of a stakeholder type - management method fit or misfit on focal organisation representatives' perception as to the performance of the focal organisation in meeting this stakeholder's expectations. Specifically, we focus on a two-fold research question: (1) What is the relationship between external parties and management methods in the context of our sample of European police forces?; and (2) What combination of external parties and management methods is associated with higher perceived performance?

As is common in the contingency theory literature, we hypothesise that a fit will have a positive effect on (perceived) performance.

Hypothesis 1. *A fit between a stakeholder type and a management method is positively associated with the police's perception of performance on the expectations of this external stakeholder.*

This hypothesis can be argued to be tautological. After all, measures of 'fit' will have positive association with performance by the very definition of the 'fit' concept. So, of course, Hypothesis 1 is empty without a detailed specification of what fit entails in our

specific context. In this respect, the added value of contingency fit studies is that we have to specify precisely what 'fit' does imply. Here, we follow the logic implied by Table 2.3, derived from Scholtes and Johnson (2001) and Savage et al. (1991). We summarise the four cases of fit in the form of four lemmas.

Lemma 1. *If the stakeholder is a **marginal** stakeholder, then a **monitoring** strategy will result in a fit.*

Lemma 2. *If the stakeholder is a **non-supportive** stakeholder, then a **defensive** strategy will result in a fit.*

Lemma 3. *If the stakeholder is a **supportive** stakeholder, then an **involvement** strategy will result in a fit.*

Lemma 4. *If the stakeholder is a **mixed blessing** stakeholder, then a **collaborative** strategy will result in a fit.*

The literature indicates that there may be other forces at work, next to fit, that may be related to the performance of a stakeholder management strategy. Scholtes and Johnson (2001) argue that seven important stakeholder characteristics have to be taken into account in a stakeholder analysis:

1. Formal authority over the focal organisation;
2. Influence on the focal organisation;
3. Understanding of the focal organisation's activities;
4. Predictability of the stakeholder's expectations;
5. Active management of expectations by the focal organisation;
6. Difficulty for the focal organisation to meet stakeholder's expectations; and
7. Performance on the stakeholder's expectations by the focal organisation.

These seven characteristics suit the stakeholder management typology very well, but do not cover the typology completely. Authority (1) and influence (2) are captured by the measure of 'influence' in the stakeholder typology, and understanding (3) and predictability of expectations (4) are captured by 'interest'. Performance on stakeholder expectations (7) is the perceived performance outcome measure (see following section). This leaves active management of (5) and the difficulty to manage (6) for further consideration. Below, we will explain the relevance of both extra variables, as identified by Scholes and Johnson (2001), with reference to the extant literature.

According to Leach and Britain (2005), stakeholder's perceptions of decisions made by organisations are positively influenced by the stakeholder's involvement in the focal organisation's decision-making processes. Even if the decision made by the focal organisation is not the preferred outcome from the perspective of the stakeholders, involved stakeholders tend to respond more positively because they feel that their arguments have been seriously considered. Such involvement should be genuine; the feeling of 'window dressing', such as merely involving stakeholders as a mechanistic tool of regulatory compliance, can provoke resentment among stakeholders (Foo et al., 2011). But genuine active stakeholder management will increase the level of stakeholder understanding and acceptance that not all their expectations will be met, or that they might have to lower their expectations. Waddock and Graves (1997) also show in their research that treating stakeholders decently through relations is crucial in managing them successfully.

Hypothesis 2. *Active management of a stakeholder is positively associated with the police's perception of performance on the expectations of this external stakeholder.*

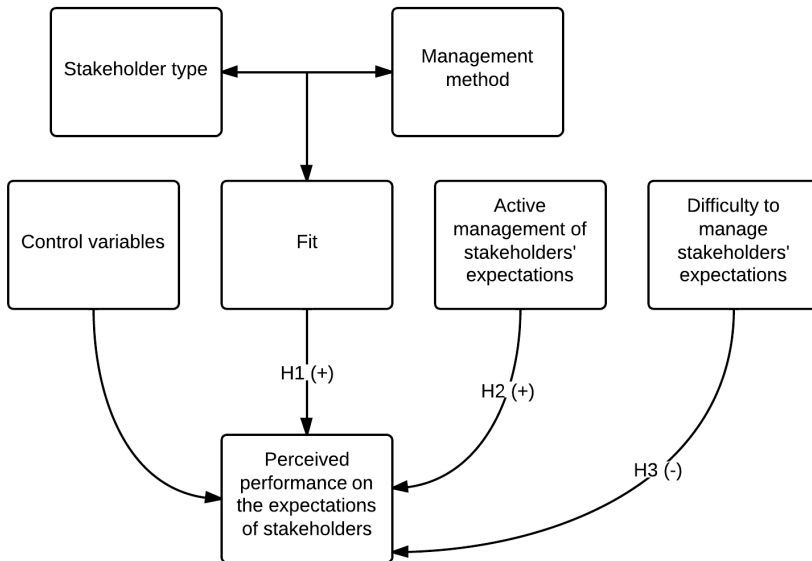
Stakeholder expectations may be difficult to manage when they are unclear. Clear expectations foster mutual accountability and execution responsibility (Austin, 2000). Unclear expectations would

thus negatively influence performance with regard to these expectations, because demands are less likely to be satisfied. Additionally, Austin (2000) argues that poor interpersonal relations can negatively affect the relationship between organisations. If difficulty in managing relations is due to interpersonal issues, this could have a negative effect on the focal organisation's performance on stakeholder expectations.

Hypothesis 3. *Difficulty to manage the expectations of a stakeholder is negatively associated with the police's perception of performance on the expectations of this external stakeholder.*

Figure 2.1 summarises our conceptual model. All arrows in the model point in one direction, suggesting causality, yet we want to emphasise the correlational nature of this study. We elaborate on this issue in the section below.

Figure 2.1: Conceptual model



2.3 Methods

2.3.1 Research design

A research design shows how one intends to identify the causal effect of an independent variable on a dependent variable. In our case, that would be, for example, the causal effect of 'fit' on the perceived performance on expectations of stakeholders. Ideally, we would conduct a randomised experiment (with a sufficiently large number of participants), where an experimental variation in fit is created. In that case, if we see any association between fit and performance, then we can conclude that fit causally affects performance. Now, this is unfortunately not feasible. To assign police officers and stakeholders randomly to a (mis)fit situation may be not only undesirable, it may be borderline unethical. If the police officer would start to bluntly ignore a public prosecutor, this could mean that the process of justice is hampered, because the police does not deliver evidence for criminal cases.

However, because we have to deviate from the golden standard of a randomised experiment, it means that we struggle with a number of issues which make it very difficult for us to make causal inferences about our study. We observe the police and its (mis)fits with stakeholders as they are, and the way things are is unlikely to be random. There may be characteristics that we do not observe, but which could be important. Because we do not take these unobserved characteristics into account, we may be over- or underestimating the effect of fit (or one of the other independent variables) on perceived performance. We will try to restrict a number of issues. We have added controls that we find theoretically to possibly have an effect on the outcome variable, in an attempt to deal with the omitted variable bias. However, we cannot be sure these controls are responsible for all unobserved variation; most likely, they are not. As we make use of a cross-sectional design, we cannot benefit from the estimation techniques that can be used with panel data, mostly in terms of coping with omitted fixed effects. However, the least we could do, and have done, was to add coun-

try dummies to the estimation, to account for this potential fixed effect.

Hence, as we find the research design to be far from perfect, we will not make any causal inferences about our findings, and (still carefully) treat the findings of this correlational study as mere associations between the variables of interest. This does not mean, however, that work of this nature has no merit on its own. Explorative studies like these pave the way for further research, as associations can suggest which variables may be of the greatest interest or relevance. We will discuss the implications of the weaknesses in our research design in the discussion of this chapter.

2.3.2 Data

Contingency fit studies come in many different forms and shapes (Parker and van Witteloostuijn, 2010). An important distinction is the one between criterion-free and criterion-specific contingency studies. Only the latter relate contingencies to an outcome variable such as performance, similar to what we aim to do in the current study, although we do not intend to make causal claims. Another important distinction follows from the precise conception of fit, and the corresponding method of measuring fit. For instance, distance measures of fit are often contrasted with interaction measures. Distance measures require the identification of an "optimum", something that is not needed in the context of interaction measures of fit. In the current study, we employ a conception and measure of fit that is not associated with the need to identify an "optimum". So, we adopt a criterion-specific but optimum-free conception and measure of fit. Within the context of this approach, two key issues relate to (a) the choice for one method of measuring fit to the other and (b) the associated empirical methodology of analysis given the involved sample size. We return to (a) below, and first deal with (b).

Siggelkow (2001, 2002) reports findings from two fit analyses with data from two case studies of a clothing manufacturer and a mutual fund provider. Burton et al. (2002) used a sample of approx-

imately 250 firms for multivariate regression analyses. Obviously, both approaches have their benefits. In-depth case studies provide much and rich information, while larger samples allow for statistical tests and conclusions that can be generalised. In deciding on the sampling strategy in the context of the current study, a trade-off was made between a wish for representativeness and binding capacity constraints, as we will explain below.

Our study analyses data that were collected in the context of a large EU-financed project called COMparative Police Studies In The EU - or COMPOSITE. Below, we will briefly introduce the sampling strategy and data. For further details, we refer to the COMPOSITE website.¹ Our sample is betwixt-and between, and has a hybrid character. For the current study, we have a sample with a large number of respondents (297); yet we have only studied a small number of police forces (14). As we will explain below, we opted for regression analyses exploring the answers from our 288 respondents, after removing cases with missing values, constructing a fit measure at the individual respondent - stakeholder dyad level.

Looking at the level of the individual is very relevant and important for police organisations. This is because a lot of the people who work at police organisations deal with a great variety of stakeholders every day. A detective has an different relation with citizens than a community police officer, even if they work in the same police force. They have to deal with different expectations, which they may also have to manage in different ways. Much of the literature is based on stakeholder management by managers, but looking at the managers only would certainly not be sufficient in the policing context. Of course, there may be some general guidelines, to some extent, regarding how to deal with particular stakeholders, for example when it comes to social media usage by police officers towards the public, or codes of conduct for using force against citizens. Overall, however, police departments, units, and individuals can make relatively autonomous choices as to how to deal with

¹<http://www.COMPOSITE-project.eu>

stakeholders, especially if you would compare it to the average large private or even public organisation. An employee of a tax agency, for example, is not as flexible as a police officer who may give a warning for a breach of the law. A flexible attitude towards stakeholders by police organisations may be an essential capability to maintain the satisfaction of the citizenry. This makes it relevant to ask police officers at different levels what their organisation does to manage a stakeholder. It allows us to question which different parts/individuals of the organisation deal with which stakeholders, how they do that, and if this leads to satisfaction with the stakeholder. Stakeholder satisfaction should be achieved at different levels of the police organisation in broad ways to get legitimacy from the public. Community officers should satisfy their neighbourhood, up to the senior managers who have to properly manage politicians and senior managers of other public organisations.

The sampling strategy aimed for a right mix between internal and external interviewees - the former across higher and lower levels in the police forces, uniformed as well as investigative police officers, and rural as well as urban police forces (van den Born and van Witteloostuijn, 2011). Information was gathered by means of interviews, complemented by quantitative data through a mini-survey with statements on which interviewees could give a rating (on score sheets with seven-point Likert scales) to provide additional information. In this mini-survey, interviewees were asked to score each mentioned stakeholder on the seven items of Scholes and Johnson (2001). Hence, the number of questions posed to interviewees varied with the number of stakeholders they discussed in the interview. Both interviews and surveys were in the native language of the interviewee. Before the interviews were started, a detailed interview protocol was developed. Interviews lasted for one to two hours, and respondents filled in the surveys directly afterwards.

Interviewers were from the respective country teams, and spoke the country's native language. Most interviews were processed throughout the month after that. For every interview, a summary

of the answers was made available in English; from this we derived the qualitative information. In total, after removing cases with missing values, 288 interviews were used for the current study, from seven different countries and fourteen police forces/regions. Table 2.4 gives an overview of interviewed countries and police forces used in the current study. The countries in the project were originally selected to provide a representative view of European police forces. Countries in West, East and Southern Europe are represented; only Scandinavia was not included. Large European countries such as France, Germany and the United Kingdom are part of the project. However, the Czech Republic, France and Italy were dropped from this particular dataset, because the number of responses was not sufficient for quantitative analysis.

Table 2.4: Countries included in the sample

Country	Forces / regions
Belgium	Euregion Maas-Rijn Euregion Kortrijk-Lille-Tournai
Germany	Berlin Brandenburg
Macedonia	(no defined regions available)
Netherlands	Amsterdam Amstelland Rotterdam Rijnmond Gelderland-Zuid
Romania	Border police
Spain	Madrid Barcelona
United Kingdom	Sheffield Oldham Yorkshire

Our final sample ($n = 288$) consisted of approximately 81 per cent men and 19 per cent women. A majority of the respondents (53 per cent) is between 36 and 50 years old. Nineteen per cent is older than 50 and 24 per cent is younger than 36 years. With respect to the

representativeness of the sample, younger and older people may be under-represented. Females might also be under-represented in the sample, but generally the proportion of females in police organisations is lower than that of males. The majority of the respondents have been through higher education (70 per cent), 29 per cent has education of an intermediate level and only 1 per cent has received only basic education. Of the respondents, 48 per cent is in an operational function, 20 per cent in a supervisory function and 32 per cent in a top / strategic / senior function, which probably means an over-representation of the highest level. Average tenure is 18.5 years. There is presumably somewhat of an over-representation of higher educated respondents. It is not surprising that only a very small proportion of the respondents have only received basic education as police officers generally need to go through intermediary or higher education before they can carry out their policing functions.

We do not expect that these under- and over-representations in the sample are an issue in terms of validity, as our sample implies a good representation of different functions within the police. At different functional levels, police officers have to deal with different external parties. While high-level executives will have to handle external parties such as the government, officers at an operational level will be more practically involved with external parties such as emergency services. Hence, this study is a fairly good representation of different functional levels, providing information about a broad range of external stakeholders.

2.3.3 Measures

Dependent variable

Evidently, measuring the satisfaction of a diverse group of stakeholders with an even more diverse range of interests is a challenge. Following the suggestion of Scholes and Johnson (2001), we included a survey item that asked interviewees to assess their perception of their police force's performance on the expectations of

external stakeholders. We refer to this satisfaction measure as the *police's performance on stakeholder's expectations*. Specifically, this was measured by means of the statement 'We perform very well on the expectations of external stakeholder x', where respondents could answer on a Likert scale that runs from 1 to 7, indicating to what extent they agree with the statement, where 1 is associated with 'completely disagree' and 7 with 'completely agree'.

In the interview, each respondent was asked to list her or his police organisation's key stakeholders. Subsequently, they were asked to answer a series of questions regarding these stakeholders, including the above item involving performance evaluation. In this way, we could (a) flexibly accommodate differences across police organisations and (b) collect data that offer the opportunity to construct a performance measure that is uniform across respondents and stakeholders (and countries). Many respondents gave a series of evaluations as to a set of different external stakeholders (e.g., the general public and public prosecution), but not all respondents mentioned the same (number of) stakeholders.

The stakeholder management literature does not specify how stakeholder satisfaction should be measured, and thus leaves us at liberty to choose a variable appropriate for this study. We recognise that using a self-perceived subjective dependent variable may have its downsides, such as potential biases.² By way of validity check, we interviewed 25 external stakeholders, asking them to score the same seven-point Likert performance assessment item from their perspective. A *t*-test of sample means indicates that the police scores are not significantly different from those of our sample of police professionals. We examine the problems of this measure more elaborately in the discussion. Furthermore, it may appear illogical to measure organisational constructs at the level of the individual. As was already explained earlier, the stakeholder handling by police organisations can be very diverse, because even individual officers have autonomy in deciding how to deal with stakeholders; they are often stakeholder managers themselves, with

²We discuss this issue more extensively in Chapter 5.

overlapping environments with other officers from their unit, force or organisation. This is why we take the individual level for our research, and do not aggregate this to the level of the police force or the organisation, because aggregation would require a stakeholder to be of a certain type, and to hence have only one theoretically correct stakeholder management strategy. We do ask, however, what the *police* does to manage expectations and how the *police* performs on the expectations, rather than asking what the *individual* does and how the *individual* performs on expectations. This is because the individual police officer will often not be the only one to manage expectations. His/her stakeholder environment may overlap with a substantial number of colleagues to whom the stakeholder poses the same challenge and where there is a common management strategy towards that stakeholder. We do not want to focus on what a single police officer does to satisfy a stakeholder, but rather what is undertaken at a certain level of the organisation to achieve stakeholder satisfaction.

Independent variables

First, relating to Hypothesis 1 and the associated lemmas, we constructed a fit measure from the data by creating a dummy referred to as *Fit*. To do so, we first had to categorise stakeholder types and management methods in line with the conceptions implied by Table 2.3. This categorising exercise was initially done by one of the authors. Subsequently, a random selection of cases has been checked by a second author. This has the benefit that the work is done consistently, but the disadvantage that the categorisation has not been fully open to discussion for each and every case. There are no rules of thumb for formulating 'fit' variables, as work from the contingency literature shows (e.g. Burton et al., 2002; Parker and van Witteloostuijn, 2010). Also Blair et al. (1996), who use the mapping from Savage et al. (1991) empirically, do not provide a strong formalisation as to how they categorise stakeholders and management methods on the basis of open questions. Given that there is a lot of variety in formulating fit, we would not necessarily argue

that our formulation is optimal. The main strength is that it is well explained and allows for repetition without a change in the results. We will briefly discuss the coding process below. Detailed coding schemes can be found in Appendix A.

Initially, based on the qualitative interview information and score sheet results, external stakeholders were classified into our four stakeholder type categories: marginal, non-supportive, supportive or mixed-blessing. From the score sheet statement 'This external party has high influence on our activities', we could already divide external parties into high and low-influence external stakeholders. External parties with an influence score above 4 were classified as external stakeholders with greater influence, and those with scores of 4 and below were coded as external stakeholders with smaller influence. We chose 4 as the threshold assessment to distinguish high from low influence because of the nature of the associated seven-point Likert scale. With scores above 4, respondents agreed (to some extent) that the external stakeholder has an influence over police activities; scores of 4 and below indicate the absence of a noteworthy influence of the external stakeholder on police activities.

Having made this distinction, we looked into the qualitative answers. Interviewees were asked to mention the interests of external stakeholders. If those interests included resources that the external stakeholder demands from the police, we could categorise this external stakeholder as supportive or mixed-blessing, depending on the influence level that we found earlier. If interests were marginal, non-existent, not relating to the police, or only included resource demands on behalf of the police, then the stakeholder was categorised as marginal or non-supportive, again dependent upon the influence level.

For the management methods, we extracted all information from the qualitative interview material. Interviewees were asked how the police manage the expectations of external parties. By means of a list of keywords, included in Appendix A, we structurally categorised the answers in Table 2.3's matrix of different

management methods (monitoring, defence, involvement and collaboration strategies). Of course, with qualitative data, this is evidently open to interpretation. The management strategy categorisation is as much as possible based on Savage et al. (1991), as they do give examples of the different management strategies they discuss. All strategies that were found in the data, but that were not described by Savage et al. were categorised at our discretion. Possibly the categorisation is not perfect, but at least it is transparent.

1. We categorised stakeholder management methods as monitoring when the police have little or no contact with the external party, or only on particular occasions that concern the stakeholder. Examples are (semi-)annual meetings and (informal) contacts for specific matters. A few respondents claimed to ignore particular stakeholders' requests altogether.
2. Defence was coded when the police simply were obliged to meet the demands of external stakeholders without any question or if the police try to guard themselves against the demand of stakeholders. Interviewees frequently indicated that they can 'just try to meet the demands' - for example, those of judicial and governmental bodies. In other cases, the police seek to convince external stakeholders that they are not capable of meeting their expectations in an attempt to convince these stakeholders to lower these expectations.
3. Stakeholder management methods that involve more frequent face-to-face contact with external parties and where stakeholders are given some influence, but only on particular issues, were classified as involvement strategies. Key words here include task forces, meetings to discuss concrete issues, consultation platforms, and programmes for information exchange.
4. Collaboration strategies involve frequent communication and explicit cooperation with external stakeholders, where both parties can affect each other. Examples are weekly meetings

and frequent feedback contacts. Additionally, rules and regulations that force a cooperative partnership upon the parties by law were classified as a collaborative strategy.

For the purpose of our analysis, it is important to assume that stakeholders are independent, i.e. the management by the police of one stakeholder does not influence the management of another stakeholder due to capacity constraints. On a project, for example, where time and resources are limited, managers may have to make decisions about which stakeholders to prioritise and may not have the opportunity to execute the optimal management strategy with each and every stakeholder. This means that 'fit' with some stakeholders can have spill over effects to cause 'misfits' with other stakeholders. We would like to argue that we may assume independence of stakeholders in this case, as the police has plenty human resources to tend to stakeholder management, and hence will be less bothered by capacity constraints, at least in this respect. We will return to this issue in the discussion.

Having coded both stakeholder types and management methods, we subsequently created a fit dummy, where 1 indicated a fit (and 0 a misfit), in case of the following pairs, in line with Table 2.3: (1) marginal stakeholder - monitoring method; (2) non-supportive stakeholder - defence method; (3) supportive stakeholder - involvement method; and (4) mixed-blessing stakeholder - collaboration method. Table 2.5 shows a cross-tabulation of the frequencies of all stakeholder type - management method combinations. Clearly, the majority of external stakeholders are classified as supportive or mixed-blessing. Monitoring occurs relatively infrequent compared to other strategies.

The other two independent variables come directly from the quantitative mini-survey through interviewees' assessments of two statements. These statements, too, had to be (dis)agreed upon by means of a Likert scale ranging from 1 (completely disagree) to 7 (completely agree). Whether the police actively managed the expectations of an external stakeholder was asked by means of the

Table 2.5: Frequencies

		<i>Management Method</i>				
		Monitor	Defense	Involve	Collaborate	Total
<i>Stakeholder Type</i>	Marginal	4	2	1	2	9
	Non-supportive	0	8	2	3	13
	Supportive	14	16	42	43	118
	Mixed Blessing	7	66	37	124	234
	Total	25	92	86	171	347

statement: 'We actively manage the expectations of external party x'. This provides the measure of *Active management of expectations*, as is central to Hypothesis 2. Additionally, we asked respondents to assess the statement: 'It is very difficult for us to meet the expectations of external party x'. This gives our measure of *Difficulty to meet expectations*, as related to Hypothesis 3.

Control variables

Because we ask individual officers to rate the performance of their police force on the expectations of stakeholders, we include a number of demographic characteristics of respondents in our model to control for variance caused by individual characteristics of respondents. Depending on these demographics, respondents may have a somewhat biased perception of how the force performs on the expectation of stakeholders. We may expect, for example, that police officers in higher ranks are those who perform better (possibly on stakeholders' expectations as well), as this is why they have probably been promoted into these higher functions in the first place. Furthermore, police officers with basic levels of education may not perform as well as others, because policing is often argued to require intermediate or higher education. Moreover, Waldman and Avolio (1986) document non-linear relationships between age and tenure, on the one hand, and performance, on the other hand. Alternatively, older police officers, or those with longer tenure, may be better able to handle stakeholders because of their experience.

Indeed, generally, many prior studies suggest that demographic

characteristics such as age, gender, education and tenure may have an influence on outcomes such as performance, turnover, satisfaction, selection and leadership (Blau, 1985; Parsons and Liden, 1984; Steckler and Rosenthal, 1985). On top of this, Tsui and O'Reilly (1989) report that employees who share similar demographic characteristics are less prone to conflict and can more effectively work together. This may imply that respondents with lower education have more difficulty working with highly educated stakeholders, such as public prosecutors. Likewise, operational officers may work better with operational stakeholders, such as emergency services.

So, given all this, we control for the potential influence that demographic characteristics may have on the perception of performance by the respondents, both in the organisation and related to the relationship between respondents and stakeholders. The demographic control variables that we include are *Gender* (1 = male and 0 = female), *Age* (in years), *Education* (0 = basic, 1 = intermediary, and 2 = higher), *Tenure* (in years) and *Job level* (0 = operational, 1 = supervisory, and 2 = strategic/top/senior).

Furthermore, we control for country effects by including country dummies. This is important for two reasons. First, Johnson et al. (2008) state that culture can have an influence on stakeholder management practises. Second, the country where a respondent is from may influence how he/she responds to questions (Fischer, 2004).

2.3.4 Analysis

With our cross-section data, we apply linear regression. We estimate the standard errors using the Huber-White sandwich estimators. Such robust standard errors can deal with a collection of minor concerns about failure to meet the standard OLS assumptions, such as non-normality, heteroscedasticity, and few observations exhibiting large residuals, leverage or influence (Chen et al., 2011). We cannot guarantee independence of our observations, as respondents often have provided information about multiple stakeholders, hence generating multiple observations. Therefore, we cluster the respondents to take this into account. We have used Stata 10 for

all descriptive statistics and model estimations. We will estimate the following equation:

$$\begin{aligned} \text{Perceived performance}(i, s) = & \alpha + \beta_1 \text{Fit}(i, s) \\ & + \beta_2 \text{Activemangement}(i, s) + \beta_3 \text{Difficulty to manage}(i, s) \\ & + \text{Controls}(i) + e \end{aligned}$$

(With s being stakeholder and i respondent)

A final methodological remark is worthwhile making as to our single-respondent design. Because all data are self-reported and collected through the same questionnaire during the same period of time with a cross-sectional research design, common-method variance may cause systematic measurement error, further biasing the estimates of the true relationship among theoretical constructs. This involves variance that is attributed to the measurement method rather than the constructs of interest. Method variance can either inflate or deflate observed relationships between constructs, thus leading to both Type I and Type II errors (Chang et al., 2010a; Podsakoff et al., 2003). Harman's one-factor test was conducted on all questionnaire items to test the presence of a common-method effect. The result from the factor analysis is that the survey questions load onto three factors with respective proportions of variance of 25.55 per cent, 16.31 per cent and 12.15 per cent. Hence, none of the factors is responsible for the majority of the variance. From this, we can conclude that the data are unlikely to suffer from a common-method bias.

Another argument why we believe that common-method variance is not an issue here follows from the nature of our key independent variable: fit. Respondents do give all the inputs for the creation of a fit variable (influence, interests and management strategy), but the actual measure of fit has been created by the authors, not by the respondents. As the likelihood that respondents are aware of the stakeholder management contingency theory underlying this central variable is very low, we expect that artificial correlation due to fact that respondents use an implicit theory that

closely corresponds to the explicit contingency theory we try to test here is very unlikely to emerge indeed (see Chang et al., 2010a).

2.4 Results

2.4.1 Stakeholders of European police forces

Below, we give a review of the stakeholder recognition by respondents in the sample, to give a better idea of the stakeholder environment before we continue with further analysis. For a more elaborate analysis of stakeholders in this sample we refer to van den Born and van Witteloostuijn (2011). Overall, the stakeholders can be categorised into five groups; governments (local, regional, national), citizens, other police forces, partner organisations and judicial bodies.

It is not surprising that police forces mention governments as a key stakeholder, as they are often trying to live up to the standards and priorities set by governments. In countries such as the UK, the local government has formal authority over the police. In the cases where the national government has formal authority, the local influence can still be substantial. Both national and local governments tend to have expectations such as executing their tasks in a timely manner, sharing information and providing assistance in cases of public events.

Citizens are stakeholders that expect safety, protection, problem-solving interventions and quick response times. In some countries, like the Netherlands and the United Kingdom, citizens increasingly expect police officers to execute tasks that are not related to the core of policing, such as social work. Some respondents indicate however that they also make good use of citizens for gathering information for example. With the growing use of smartphones, there is more photo and video footage to be gathered amongst citizens than ever before.

Criminals and crime are becoming more complex. On the one hand, we see trends in the areas of organised crime, terrorism and

cybercrime. The open borders in Europe facilitate perpetrators to spread their criminal activities across borders, which forces the police from different countries to work together. We, however, notice that police forces find it very difficult to manage other forces, especially cross-country. When different forces collaborate, they expect good communication and information sharing, things which are realised by (in)formal agreements. Cooperation is often shaped in terms of joint task forces or integrated action teams. While by nature police forces have a good understanding of policing, expectations are often not met, possibly due to a lack of formal authority or influence. Although the performance of the involved forces could be increased by cooperation, the outside pressure is often not quite high enough to trigger successful collaboration. On the other hand, police forces have to deal with complex, multidisciplinary problems, causing them to maintain good relations with partner organisations. Large traffic accidents will need involvement of police, ambulances and fire brigades. Fighting domestic violence will often need more than the judicial chain, like a network complemented by social and healthcare partners. Though many respondents recognise the needs and benefits of partner organisations, they explain that it is often difficult to manage them because of the difference in culture, the lack of formal authority and unpredictability of expectations.

Judicial bodies as stakeholders are inherent to police work. Without prosecutors and judges, it would be impossible for the police to lock away criminals. They are often predictable in terms of what they want from the police, and they have a good understanding of police work. Luckily this is the case, as they have a high level of influence. Still, police find it sometimes difficult to meet demands of judicial bodies. Prosecutors, for example, demand much information, such as data and evidence to solve criminal cases. Taking a case to court with too little evidence is obviously making it difficult to prosecute a suspect. Yet, sometimes the police believe that their report is sufficient, but the prosecutor may not want to go to court because losing a case is a risk for his/her own career. It

is a classical clash that we stumbled upon throughout this research. Different performance measures and rewards cause incentivised behaviour in parties, which makes it unattractive (to some extent) to collaborate, even though they should do so for the greater good.

Not surprisingly, depending on the police officer's role and the county, we have found different groups of stakeholders to get mentioned more or less frequently by respondents. Some police forces, like the Romanian Border Police, deal mainly with the national government, and local governments are not that relevant. In other countries, like the UK, local governments are much more important. Higher-ranked interviewees mostly refer to policy-related and higher-level parties, whilst lower-ranked interviewees mostly refer to external parties they encounter in their daily work. Again, we refer to van den Born and van Witteloostuijn (2011) for more information and comparisons across countries and levels.

2.4.2 Results from data analysis

Descriptive statistics of the focal variables and bivariate correlation coefficients are reported in Table 2.6. As can be seen, *Age* correlates highly with *Tenure* (0.88) and fairly high with *Job level* (0.44). So, we decided not to include *Age* in the model, as this might potentially disturb to the model's estimates. Basically, the extremely high correlation of age with tenure implies that, in our sample of respondents, age and tenure are measures of a single underlying construct. The reason for this is that police officers rarely change occupation, implying that their tenure quasi-perfectly correlates with their age. Another observation that we can make is that interviewees assess, on average, their performance on stakeholders' expectations as quite high. This may indicate that police professionals are positively biased about their own organisation's performance. As the interviewees were not aware of the underlying model we test, and as we have shown that our data do not suffer from common-method bias, we assume that this is a systematic bias. Systematic bias of performance does not pose a problem in the context of the current study, as we try to explain differences in performance, and

not absolute performance levels.

We created a cross-tabulation to visually inspect the data, as presented in Table 2.7. On the one hand, a *Fit* between stakeholder type and management method is, on average, associated with a perception of higher performance on external party's expectations. On the other hand, a *Misfit* is not related with a perception of low performance. A frequent mismatch is that of a mixed-blessing stakeholder and a defensive strategy. For supportive stakeholders, the misfit collaborative strategy is even recorded more often than the fit involvement method.

Next, we estimate our model to test our set of three hypotheses. Before we include *Difficulty to manage expectations* and *Active management of expectations* in the model, we have to make sure that they do not differ greatly across the stakeholder types or management methods, because this may indicate an underlying relation that will bias our estimates. A one-way ANOVA (with Bonferroni post-hoc test) reveals only a significant difference between supportive and mixed-blessing stakeholders (for $p < 0.05$). If anything, we would expect marginal and non-supportive stakeholders to be different from their supportive and mixed blessing counterparts, as they are not dependent on the police.

We can see from Tables 2.7 and 2.8 that a monitoring strategy, which is supposedly the least active form of stakeholder management, scores lower than other strategies on the *Active management* of expectations variable. The ANOVA shows, however, that there is only a significant difference between monitoring and involvement (for $p < 0.05$), and not between any of the other strategies. Hence, we can include both variables in the regression without concern for associations with the management methods.

The control variables fail to contribute much: *Job level* has a (marginally) significant positive coefficient. We may possibly contribute this to senior officers being less aware of operational prob-

Table 2.6: Descriptives and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Age	43.04	9.17	1								
2. Gender (0=F, 1=M)	0.81	0.39	0.19	1							
3. Education	1.70	0.47	0.00	0.00	1						
4. Job level	1.84	0.88	0.44	0.14	0.13	1					
5. Tenure	18.50	9.65	0.88	0.25	-0.11	0.40	1				
6. Difficulty to manage stakeholder's expectations	3.68	1.64	0.01	-0.02	-0.05	0.10	-0.01	1			
7. Active management of stakeholder's expectations	5.23	1.38	-0.12	-0.12	-0.01	0.14	-0.07	0.00	1		
8. Performance on stakeholder's expectations	5.35	1.21	-0.10	-0.05	0.06	0.20	-0.06	-0.14	0.57	1	
9. Fit	0.52	0.50	-0.01	-0.03	-0.11	0.15	-0.05	-0.04	0.26	0.32	1

Table 2.7: Performance on external party expectations - means and frequencies (in brackets)

		<i>Management Method</i>				
		Monitor	Defense	Involve	Collaborate	Total
<i>Stakeholder Type</i>	Marginal	6.25 (4)	3.00 (2)	4.00 (1)	5.00 (2)	5.00 (9)
	Non-supportive	. (0)	5.88 (8)	3.50 (2)	4.00 (3)	5.08 (13)
	Supportive	4.43 (14)	5.00 (16)	5.57 (42)	4.79 (43)	5.08 (118)
	Mixed Blessing	4.71 (7)	5.39 (66)	4.73 (37)	5.83 (124)	5.50 (234)
	Total	4.80 (25)	5.32 (92)	5.14 (86)	5.53 (171)	5.34 (374)

Table 2.8: Means

Stakeholder type	<i>Difficulty to manage expectations</i>	Management method	<i>Active management of expectations</i>
Marginal	5.00	Monitor	4.80
Non-supportive	5.08	Defense	5.32
Supportive	5.08	Involve	5.14
Mixed blessing	5.50	Collaborate	5.53

lems, and thus being more positive. Two of the country dummies (Spain and the UK) are related to the perceived performance. The Spanish police officers are somewhat more positive about performance on expectations, while the UK officers are more negative than respondents from other countries. The complete Model 3 gives an adjusted R^2 of 0.42, implying that 42 per cent of the variance in the dependent variable can be explained by this full model. The R^2 of Model 2 is slightly lower than that of Model 3, which indicates again that the control variables do not contribute much to the explanation of perceived performance on the expectations of external stakeholders. An R^2 of 0.42 indicates that other variables not included in the model influence performance on the expectations of stakeholders. However, this observation notwithstanding, we are happy to find that our model does account for quite a large portion

Table 2.9: Regression results

VARIABLES	Model 1	Model 2	Model 3
Fit		0.48*** (-0.117)	0.51** (-0.153)
Active management of expectations		0.49*** (-0.096)	0.45*** (-0.102)
Difficulty to meet expectations		-0.10~ (-0.051)	-0.13** (-0.045)
Gender	-0.23 (-0.224)		0.01 (-0.148)
Tenure	-0.02 (-0.015)		-0.01 (-0.011)
Job level	0.32~ (-0.165)		0.18~ (-0.107)
Education	0.00 (-0.203)		0.15 (-0.149)
3.Germany dummy	-0.03 (-0.307)		0.30 (-0.24)
4.Spain dummy	0.28 (-0.255)		0.54* (-0.208)
7.Macedonia dummy	-0.12 (-0.377)		-0.01 (-0.272)
8.Netherlands dummy	-0.62 (-0.409)		-0.16 (-0.372)
9.Romania dummy	-0.31 (-0.73)		-0.06 (-0.462)
10.UK dummy	-0.94* (-0.427)		-0.62~ (-0.343)
Observations	312	374	312
R-squared	0.11	0.39	0.44
Adj. R-squared	0.08	0.39	0.42

Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.1

DV: Performance on the expectations of stakeholders
(intercept estimated, but not recorded in table)

of the variance and, more importantly, that the independent variables are significantly related to the dependent variable. Moreover, our set of independent variables - *Difficulty to meet expectations*, *Active Management of expectations*, and *Fit* - generates an impressive increase in the explained variance *vis-à-vis* the model with control variables only: the R^2 increases from a meagre 0.08 to 0.42 from the controls-only Model 1 to the full Model 3, respectively.

2.4.3 Post-hoc analysis

We see a number of patterns in the data that we had a priori no theoretical expectations for. We see that a misfit between the stakeholder and the management method does not necessarily leave a stakeholder unsatisfied. Table 2.7 shows that stakeholders can be still quite satisfied when the police manages them 'wrongly'. Another observation from this table is that collaboration is the management method that has the highest average performance on the expectations of stakeholders. Defence and involvement have somewhat lower average satisfaction rates, and monitoring the lowest. Even though our literature (Savage et al., 1991; Scholes and Johnson, 2001) does not assign certain levels of effort to different management strategies, we may reasonably believe that cooperation requires more effort than involvement, and involvement more than monitoring. Defence could in principle vary much in terms of effort, but given the satisfaction level we may choose to put it between cooperation and involvement in this context. We would like to test if delivering more effort to a stakeholder gives them greater satisfaction, but that means we have to put some value to the different management methods. We have inserted several measures of 'effort' into the regression, but found no significant results, as Table 2.10 demonstrates. For example, we ranked the management strategies between 1 and 4 (1 Monitoring, 2 Involvement, 3 Defence, 4 Collaboration) and added these to the regression, but we could not confirm that 'more effort' finds better outcomes regarding expectation's satisfaction. In another attempt, we also ranked the stakeholders from 1 to 4 (1 Marginal, 2 Support-

ive, 3 Non-supportive, 4 Mixed-blessing), and subtracted this from the fit management methods, giving a high number when a stakeholder that needs little effort gets a lot, and a low (negative) number when a high effort stakeholder receives very little. We will estimate the following equations:

$$\begin{aligned} \text{Perceived performance}(i, s) = & \alpha + \beta_1 \text{Fit}(i, s) \\ & + \beta_2 \text{Activemanagement}(i, s) + \beta_3 \text{Difficulty to manage}(i, s) \\ & + \beta_4 \text{Management method rank} + \text{Controls}(i) + e \end{aligned}$$

and

$$\begin{aligned} \text{Perceived performance}(i, s) = & \alpha + \beta_1 \text{Fit}(i, s) \\ & + \beta_2 \text{Activemanagement}(i, s) + \beta_3 \text{Difficulty to manage}(i, s) \\ & + \beta_4 \text{Management rank} - \text{stakeholderrank} + \text{Controls}(i) + e \end{aligned}$$

(With s being stakeholder and i respondent)

Another issue that we want to pay attention to is the potential multiplicativity of our variables of interest. Although Scholes and Johnson (2001) do not explicitly mention the interaction between different aspects of stakeholders and management methods, we cannot exclude the possibility that they interact with each other. The relation between fit and satisfaction may be altered by active management or the difficulty to manage expectations. The positive relation of active management with performance on expectations may be reduced by (mis)fit or the difficulty of managing expectations. Finally, the relation between difficulty to manage expectations and performance of expectations may be influenced by fit or active management. Hence we run several regressions after, including the interaction effects between our three variables of interest. We will estimate the following equation:

$$\begin{aligned} \text{Perceived performance}(i, s) = & \alpha + \beta_1 \text{Fit}(i, s) \\ & + \beta_2 \text{Activemanagement}(i, s) + \beta_3 \text{Difficulty to manage}(i, s) \\ & + \beta_4 \text{Fit}(i, s) * \text{Activemanagement}(i, s) \end{aligned}$$

Table 2.10: Regression results - post-hoc test of effort measures

VARIABLES	Model 4	Model 5
Fit	0.48** (-0.158)	0.47** (-0.155)
Active management of expectations	0.45*** (-0.103)	0.47*** (-0.1)
Difficulty to meet expectations	-0.13** (-0.045)	-0.12* (-0.046)
Management method rank	0.05 (-0.073)	
Management rank - stakeholder rank		0.08 (-0.066)
Gender	0.01 (-0.149)	0 (-0.146)
Tenure	-0.01 (-0.01)	-0.01 (-0.01)
Job level	0.18~ (-0.106)	0.18~ (-0.105)
Education	0.14 (-0.149)	0.16 (-0.147)
3.Germany dummy	0.3 (-0.238)	0.31 (-0.235)
4.Spain dummy	0.54** (-0.203)	0.54** (-0.201)
7.Macedonia dummy	-0.01 (-0.269)	-0.01 (-0.265)
8.Netherlands dummy	-0.14 (-0.368)	-0.15 (-0.366)
9.Romania dummy	-0.07 (-0.46)	-0.09 (-0.456)
10.UK dummy	-0.58~ (-0.347)	-0.62~ (-0.331)
Observations	312	312
R-squared	0.44	0.44
Adj. R-squared	0.41	0.42

Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.1

DV: Performance on the expectations of stakeholders
(intercept estimated, but not recorded in table)

$$\begin{aligned}
& + \beta_5 \text{Fit}(i, s) * \text{Difficulty to manage}(i, s) \\
& + \beta_6 \text{Active management}(i, s) * \text{Difficulty to manage}(i, s) \\
& + \text{Controls}(i) + e
\end{aligned}$$

(With s being stakeholder and i respondent)

As is demonstrated in Table 2.11, we might indeed want to consider an interaction between fit and active management, which has a negative coefficient with marginal statistical significance. Rather than strengthening one another, fit either reduces the strength of the relation between active management and performance, or more active management reduces the strength of the relation between fit and performance.

2.5 Discussion

In this chapter, we investigated how the use of management strategies with certain stakeholder types is associated with the police's perceived performance on stakeholders. We did this by means of a study of external stakeholder management of fourteen European police forces in seven countries, and by analysing how the fit between external stakeholder types and stakeholder management strategies is associated with the perception of performance of these police forces in terms of meeting these external stakeholders' expectations.

Our results show a positive association between fit and perception of performance on stakeholder's expectations. Moreover, our findings suggest that good performance can fairly well be related to just actively managing stakeholders, irrelevant of the nature of the strategy. Our post-hoc analysis suggests that fit and active management may be supplementary. Furthermore, the study provides evidence for the hypothesis that external stakeholders whose expectations are difficult to manage will also be more difficult to please, *ceteris paribus*. This set of findings offers support for our three hypotheses, and illustrates nicely the applicability of stake-

Table 2.11: Regression results - interaction effects

VARIABLES	Model 6	Model 7	Model 8	Model 9	Model 10
Fit	0.51** (-0.15)	2.04* (-0.91)	0.67~ (-0.35)	0.52*** (-0.15)	2.13* (-0.96)
Active management of expectations	0.45*** (-0.1)	0.53*** (-0.12)	0.45*** (-0.1)	0.53* (-0.21)	0.59** (-0.21)
Difficulty to meet expectations	-0.13** (-0.05)	-0.13** (-0.05)	-0.11 (-0.07)	0.00 (-0.25)	-0.01 (-0.21)
Fit*Active management of expectations		-0.28~ (-0.16)			-0.27~ (-0.15)
Fit*Difficulty to manage expectations			-0.05 (-0.09)		-0.03 (-0.08)
Active management of expectations*				-0.02	-0.02
Difficulty to manage expectations				(-0.04)	(-0.04)
Gender	0.01 (-0.15)	0.04 (-0.15)	0.01 (-0.15)	0.02 (-0.15)	0.05 (-0.15)
Tenure	-0.01 (-0.01)	-0.01 (-0.01)	-0.01 (-0.01)	-0.01 (-0.01)	-0.01 (-0.01)
Job level	0.18~ (-0.11)	0.17 (-0.11)	0.18~ (-0.11)	0.18~ (-0.11)	0.18 (-0.11)
Education	0.15 (-0.15)	0.16 (-0.16)	0.16 (-0.15)	0.15 (-0.15)	0.17 (-0.16)
3.Germany dummy	0.3 (-0.24)	0.27 (-0.24)	0.29 (-0.24)	0.32 (-0.24)	0.28 (-0.24)
4.Spain dummy	0.54* (-0.21)	0.53* (-0.23)	0.55* (-0.21)	0.56* (-0.22)	0.55* (-0.24)
7.Macedonia dummy	-0.01 (-0.27)	0.01 (-0.29)	-0.02 (-0.27)	-0.01 (-0.28)	0.01 (-0.29)
8.Netherlands dummy	-0.16 (-0.37)	-0.23 (-0.38)	-0.17 (-0.37)	-0.11 (-0.39)	-0.20 (-0.38)
9.Romania dummy	-0.06 (-0.46)	-0.06 (-0.44)	-0.05 (-0.45)	-0.03 (-0.43)	-0.03 (-0.42)
10.UK dummy	-0.62~ (-0.34)	-0.69~ (-0.36)	-0.62~ (-0.35)	-0.62~ (-0.35)	-0.68~ (-0.37)
Observations	312	312	312	312	312
R-squared	0.44	0.46	0.44	0.44	0.46
Adj. R-squared	0.42	0.43	0.41	0.42	0.43

Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.1

DV: Performance on the expectations of stakeholders
(intercept estimated, but not recorded in table)

holder management contingency theory in the context of our fourteen European police forces.

This chapter is not only interesting per se, producing insights into the three hypotheses that were posed. Our findings reveal that the police often do, by and large, not select the theoretically appropriate management methods - i.e., the stakeholder management strategies that imply a fit with the external stakeholder types. Our categorisation implies that about half of the chosen methods are misfits. Our means show that such a stakeholder strategy misfit often implies that the stakeholder will still be quite satisfied, but that another management method would have led to even greater satisfaction. Misfit is hence not associated with extreme disappointment on the behalf of stakeholders. We explored by means of post-hoc testing, whether there was an 'effort' argument responsible for these findings. We tried to find out if there was effort related to the different management methods such that stakeholders may always be more satisfied with certain management methods. We did not find this to be the case.

We did not ask, however, how much effort the management of a stakeholder took, such that we can, based on theory and post-hoc testing, only make an educated guess. We see in the data that the police often collaborates with supportive stakeholders, but we cannot argue that this is overinvestment, or that an involvement strategy would be more efficient. We do not fully want to exclude the possibility that some particular strategies may involve more or less effort, and depending on the number of stakeholders in a certain category, a particular strategy may be more desirable. For example, it is easier to maintain close contacts with one public prosecutor than with all the schools in a region. This again emphasises the desirability of a flexible approach to stakeholders by the police at different levels of the organisation. Most likely, not all schools need to be tended to, but community officers may indicate which schools are more prone to judicial problems with students.

This study contributes to the literature in several ways. We have created a multivariate model of fit that adds to the empirical fit lit-

erature, which is relatively scarce compared to the theoretical work done in this field. Furthermore, this study goes a step beyond the work of Savage et al. (1991) and Frooman (1999) by empirically testing the stakeholder contingency theories on an extensive quantitative dataset, rather than only further developing the theory or presenting a few case studies. Also, we empirically study an important public organisation: police forces.

2.5.1 Limitations and future research

This study is not without limitations. We find in the data that the majority of the stakeholders in this study are mixed-blessing stakeholders, who should be collaborated with. Respondents have been asked to name key stakeholders, which might make them prone to mention stakeholders with high influence/authority and clear interests. There might be more stakeholders of other types in the policing environment that are under-represented in the answers of interviewees. We would still like to argue, however, that collaboration is an important management strategy, as it is one that should be employed with stakeholders that are considered to be 'key' by interviewees. Collaboration is a form of stakeholder management that could not only lead to satisfied stakeholders, but possibly also to better performance for both parties on specific issues, if conducted correctly. In Chapters 3 and 4 we will dig deeper into the optimisation of collaboration between the police and other public organisations.

Another challenge is to measure and analyse performance on stakeholder's expectations which is difficult for an organisation where the interests of stakeholders are so diverse. Within the time constraints in the COMPOSITE interviews, unfortunately, the only option was to include our subjective performance assessment item and to ask police officers to give their evaluation. To ask insiders about their performance is not uncontroversial, as this may be associated with systematic biases. Yet we feel that our self-perceived measure of performance is appropriate for a first enquiry in our context for three reasons. First, subjective performance measures

are commonly used in general management research, as objective performance data are often difficult to obtain (Dess and Robinson, 1984). Second, we had 25 interviews available with external stakeholders, which we used to test for significant differences between the performance perception of external stakeholders and police professionals. Although the *t*-test indicates that the difference is not significant, we observe that, interestingly enough, if anything, the external stakeholders are more positive about the performance of the police than the police interviewees. Third, only variance matters in the current study, and not absolute values. A systematic positive bias in the perception of police interviewees would not be harmful, as we still find variance that can be explained by our independent variables. We are however not sure whether each respondent has the same bias, and thus have to be careful with the interpretation of the coefficients; these may be biased. A measure of the performance on stakeholder satisfaction would be improved by asking at least also the stakeholders what they think. It might be of help if interests are specific to ask satisfaction questions related to different aspects of their specific interest. Suppose that a stakeholder wants information from the police, questions could be asked in relation to the extent, manner and the speed in which information is transferred.

We have assumed the independence of stakeholders, and explained why we trust this to be a reasonable assumption for this study. Because the police is a large organisation, consisting mainly of human resources, we believe it to suffer much less from binding constraints regarding stakeholder management than a 'regular' organisation. The reasoning stakeholder management is a natural part of much police work anyway. We cannot, however, guarantee that this always happens. The police is still a hierarchical organisation; despite the autonomy of police officers, they might not always be able themselves to extract the necessary resources for all their stakeholder management activities, causing capacity constraints at the lower level. We would expect this to be an exception however, and the occurrence would be random rather than predictable.

There are also some research design issues that must be touched upon. Our findings were not based on randomised trials. Rather, we studied the relations between stakeholders and police (officers) as they exist (or are perceived) in real life. This means that we may not have observed all variables that may have an effect on perceived performance, such that results may be subject to over- or underestimation due to, for example, an omitted variable, or an omitted fixed effect bias. The nature of the bias on the included independent variables depends on the nature of the correlation between the dependent and the unobserved variable and the independent and the unobserved variables. If these unobserved variables are either positively or negatively correlated with both the independent and the dependent variable, then the coefficient we have estimated in the study may be overestimated. If the unobserved variables correlates positively with the independent variable, but negatively with the dependent variable (or vice versa), then the effect will likely be underestimated.

One issue that we have not taken into account, for example, is the history that the police has with the stakeholder. We do not know how long the police has been managing a specific stakeholder and/or whether or not they have a pleasant relation with the stakeholder. These will be aspects that may be positively related with fit, as over time the police might learn how to react to a stakeholder in a satisfactory manner. If the police and the stakeholder have a good relation, they might manage the stakeholder more actively. As it may also be positively associated with perceived performance of stakeholders, possibly the associations between fit and/or active management with perceived performance are overestimated. The association between difficulty to manage stakeholders and performance may then be underestimated, because the difficulty to manage stakeholders should reduce as the police and the stakeholder have a longer or warmer bond (negative correlation), while the relation with perceived performance is positive.

All in all, we believe that the findings of this exploratory study

have suggested a potential use of contingent stakeholder management and we would encourage future research to explore this matter further, with a stronger research design in order to better judge the underlying causalities.

2.5.2 Policy implications

Beyond the theoretical contribution, this study can provide practical insights to police officers at different job levels. Even though they all have to deal with external stakeholders in the context of their own function, the main findings from this study, we believe, can be generalised across functions. Management strategies that fit with stakeholder types are associated with better performance on the stakeholders' expectations. Although we have to be very careful about making implications about causality, theory and logic suggest that fit will rather influence perceived performance than the other way around. A different research design is necessary to draw implications about causality from a statistical perspective. A policy or management implication on the use of 'fit' to design management strategies in line with stakeholder types to enhance stakeholder satisfaction hinges on both the causality and the appropriateness of a self-scored performance measure, and thus may be a bridge too far.

Chapter 3

Characteristics of members in public interdisciplinary interorganisational teams*

We may have all come on different ships, but we're in the same boat now.[†]

Abstract

This chapter investigates which team member characteristics contribute to perceived cooperation and performance of Public Interdisciplinary Interorganisational (PII) teams. We use self-reported data from professionals working in Dutch so-called Safety Houses to uncover the relationship between team member characteristics, interdisciplinary cooperation and perceived team performance. We find team member extraversion to be positively related to cooperation. Perceived resistance from the partner organisation is negatively associated with cooperation. Perhaps most interesting is our finding that professional autonomy of team members is positively related to cooperation, but negatively to performance, possibly suggesting an optimal balance of autonomy.

*This chapter is the result of joint work with Arjen van Witteloostuijn and Arjan van den Born

[†]Martin Luther King, Jr.

3.1 Introduction

As was pointed out in Chapter 2, key stakeholders to the police are often mixed-blessing stakeholders, with whom collaboration is the strategy associated with the greatest satisfaction of the stakeholder. In the modern world, organisations recognise that cooperation in different forms can also assist them in performing better on issues that go beyond their core business, (legal) responsibilities or capabilities. Increasingly, networks of stakeholders begin to arise and stabilise around certain issues in the public sector, like crime, homelessness and healthcare (Provan and Kenis, 2008). Based on the findings of Chapter 2, one may wonder whether network collaboration of this kind is even a desirable strategy. This would only be the case if the stakeholders are of a mixed-blessing nature. For this to be the case, stakeholders need to have interest and influence. We would like to argue that this is the case here. Logically, if the stakeholder did not have interest in the issue, it would not get involved in the network. The level of influence of stakeholders in an issue-based network will vary, but has to be present at least to a reasonable extent, because a stakeholder with low influence is unlikely to stay in a network where it gets left behind by stakeholders who decide to collaborate (Roloff, 2008).

Networks in health care are the prime example used in the scientific literature on public sector collaborations (e.g. Provan and Milward, 1995; Provan and Sebastian, 1998; Vollenberg et al., 2007). Public networks are usually formed around a certain issue where multiple stakeholders (such as nurses, specialists, general practitioners and pharmacists) need to be involved to give optimal care to patients like those in palliative care or patients who have had a stroke (Kramer et al., 2013). In the study of such networks, the theoretical basis is commonly network theory, and the relations amongst the stakeholders are the focus in determining how networks form, how they should be governed, how ties are used, how committed stakeholders are, etcetera.

Network theory or network analysis tries to predict behaviour

of individuals, groups or organisations given their social structure, and is useful in a broad array of fields. It may just as well explain who needs to take the lead in a group of people as well as in a network of organisations. Because it says more about the characteristics of relations between stakeholders, the attributes of stakeholders themselves generally receive less attention. We would like to argue that, for the police, the characteristics of stakeholders will commonly be very important when they form an issue around a network. This is because the police will often have to work with stakeholders from other disciplines, and not surprisingly so. The number of organisations in law enforcement and order maintenance tends to be limited, so that a lot of stakeholders will not have this core business. Yet, many issues that the police has a stake in are not exclusively judicial (anymore). For example, the common repeat offender who is often addicted, spiralling in criminal networks, and sometimes without a home or identification, is unlikely to alter his behaviour by the repressive capabilities of judicial organisations alone. Forming and working in a network with organisations from other disciplines may have different implications than working in a mono-disciplinary network; beyond the relationships, the characteristics of the stakeholders matter.

Because most of the focus has been on the network and relational aspects of public sector collaborations, in Chapter 3 and 4 we rather seek to deepen our understanding of the characteristics of stakeholders in relation to perceived performance of interdisciplinary interorganisational efforts involving the police. Network theory has proven to be an interesting basis for exploring the the functioning of public networks, but the main theoretical focus here will be on the literature on interdisciplinary cooperation (Bronstein, 2003), which argues that the characteristics of organisations and individuals in networks influence the (perceived) success of interdisciplinary collaboration. We do however not want to ignore all the knowledge on network performance, and there are thus some organisational-network issues that we incorporate the most prominent one being, as we will see in Chapter 4, the gover-

nance structure of the network. Depending on the size, trust and centrality of partners in the network, the mode of governance may vary. The networks studied in Chapters 3 and 4 are governed by an Network Administrative Organisation (NAO), which is an independent body whose purpose is to govern without intervening in the content. This is the optimal governance mode for networks with many participants, where trust is low, and where no one has great centrality, which we expect to occur frequently in these types of networks, as we will explain.

The literature on interdisciplinary cooperation focuses more commonly the characteristics of individuals, because, on the one hand, at operational level it are the individuals who cooperate (Bronstein, 2003), and, on the other hand, studies on interdisciplinary collaboration between organisations are very scarce. Most of the studies look at interdisciplinary collaboration within one organisation, for example, nurses and physicians collaborating, or professors from different departments at a university working together (exceptions are Abram et al., 2005; Bronstein and Wright, 2007; Cole and Logan, 2008; Maschi and Killian, 2011). When studying interdisciplinary collaboration within one organisation, a lack of variance in the organisational characteristics does not make this a highly interesting variable. Smith and Mogro-Wilson (2007) also show that most of the variation in collaborative practice is at the individual level, indicative of the importance of studying this topic at this level, rather than the organisational one.

What it then essentially comes down to in most studies is that scholars look at the characteristics of a number of individuals working in an interdependent fashion toward a common and meaningful goal, and that is exactly as how we could define a team (Morgan et al., 1986). This is why we rather describe the operational aspects of collaboration as working in a team, then simply framing it as a stakeholder management strategy as would be in line with Chapter 2. Indeed, it is a management strategy, but not one solely executed by the police. Collaboration is a mutual effort, which needs inputs from all those involved to be satisfactory. Clearly, taking this ap-

proach invites us to take on board literature from the stream of teamwork studies.

The literature on team behaviour and team performance is very large, and still growing rapidly. But to determine what exactly defines a team is not so straightforward. With a definition as broad as that of Morgan et al. (1986), which we have used above, we have to be cautious not to apply the empirical findings about specific kind of teams across the literature to every type of team. A taxonomy of teams is needed to understand the relationship between team behaviour, on the one hand, and team performance, on the other hand, and to assess what findings apply to which kind of teams. The most commonly studied type of team is probably a group with members (a) sharing a common background that (b) work together for a lengthy period (c) within the boundaries of the same organisation (Beaubien and Baker, 2004), (d) toward the same goal, and (e) under guidance of a team leader of some sort. These are the teams that we commonly encounter in both the public and the private sector, such as a squad of firemen or a department of accountants.

With increasing cooperation between and within organisations, the literature becomes more diverse. For instance, studies may focus on temporary project management teams that work together for a short spell of time, both within an organisation (intra-organisational) (Pinto et al., 1993) and between organisations (inter-organisational) (Leufkens and Noorderhaven, 2011). Other work has been done on joint ventures, where inter-organisational cooperation is established to strive for a shared goal, whilst the involved organisations try to protect their own interests (Cyr and Schneider, 1996; Hoang and Rothaermel, 2005). In this tradition, special attention has been paid to cross-cultural joint venture teams (Beamish and Delios, 1997). Similarly, as we described earlier, other studies deal with inter-organisational networks within the same discipline or sector, such as healthcare networks (Vollenberg et al., 2007). But there are also studies of interdisciplinary teams in the same organisation, such as hospices and schools (Bordons et al., 1999; Reese and Sontag, 2001). Academics have studied public-private partner-

ships (Grimsey and Lewis, 2004; Roggencamp, 1999; Schaeffer and Loveridge, 2002), teams with complex *vis-à-vis* simple tasks (Higgs et al., 2005; Pepinsky et al., 1960), and virtual teams that involve members who do not meet physically very often, or not at all (Gibson and Cohen, 2003; Warkentin et al., 1997).

However, to the best of our knowledge, still limited research has been directed at the teams that work in interdisciplinary networks in the public sector: the Public Interdisciplinary Inter-organisational team (PII team, in short). In such teams, professional members from different public home organisations collaborate on joint tasks. We define the 'home organisation' in this context as the focal organisation for the professional: The organisation that pays the professional's salary, and where the professional executes her or his primary tasks. We use the term 'partner organisations' to refer to organisations that are represented in the PII team, but which are not focal to the professional member involved. We argue that PII teams are a special kind of teams, struggling with three kinds of difficulties that make them especially hard to work in:

- due to their public character, PII teams can measure outputs, but it is difficult to measure how output of a PII team is related to performance (or outcomes), and are hence it is often uncertain if their cooperation is actually worth the effort.
- as a result of the interdisciplinary composition, PII teams typically have members with different professional backgrounds, not speaking each other's language, and having different agendas and/or performance measures.
- given their inter-organisational nature, PII team members may have to fight for mandate with and within their home organisation, to have the discretion to operate within the PII team with an open eye for both the team's and their home organisation's interests.

PII teams are, despite their inherent difficulties, useful and upcoming (Provan and Kenis, 2008). Police forces are likely to be(come)

part of cooperation efforts between judicial, welfare and/or health-care partners, because punishment, healthcare and rehabilitation often have to be combined into a coordinated mix in order to help individuals with complex profiles, involving criminal, health and social issues. Yet in other areas, the need for such PII teams is on the rise, too. Especially in areas with so-called wicked problems (van Bueren et al., 2003), where private organisations will not step in, a PII team is often the only option to tackle the issues involved. The potential domain of PII teams stretches far beyond the public management of policing, healthcare and social support, but includes the wider issues of environment, traffic, safety, health regulations, et cetera. Given the growing importance of complex and wicked problems, the study of these PII teams is important to find out what characteristics (members of) PII teams are associated with better cooperation. Specifically, in this chapter, we explore the question;

How are the characteristics of individuals working in a public interdisciplinary interorganisational team associated with how these individuals perceive their collaboration and team performance?

Here we look specifically at the personal and professional characteristics of individuals and the structural characteristics provided to individuals by their home organisation.

This chapter's contribution to the literature is at least fourfold. First of all, little is known about PII teams, as yet. While the literature on interdisciplinary cooperation is plentiful in the field of social work, education, hospices and hospitals (Oliver and Peck, 2006), by far the majority of these studies relate to interdisciplinary teams within a single organisation. Some work has been done on police-probation partnerships (e.g. Corbett et al., 1996) and there are also a number of case studies on collaboration in a network of police, social work and healthcare organisations (Abram et al., 2005; Bronstein and Wright, 2007; Cole and Logan, 2008; Maschi and Killian, 2011), but the current study looks at individuals that come from an even larger and broader range of public organisations. Second, in this chapter, we link team member characteristics

to both cooperation and performance. Although Bronstein's (2003) model of interdisciplinary cooperation has been tested empirically before (Parker-Oliver et al., 2005), we contribute to this prior work by adding a measure of performance satisfaction to the analysis, next to the perceived collaboration. This is in line with the normative stakeholder theory that centralises the satisfaction of stakeholders, as satisfaction of stakeholders is necessary for maintaining relations with stakeholders over time. Third, we adapt the Bronstein (2003) model to be in line with other literatures on teams, and especially the unique features of PII teams, by focusing on a specific set of team member characteristics. Fourth, we empirically study a very special type of PII team that heavily involve the police: (Dutch) Safety Houses.

3.2 Literature review

3.2.1 Interdisciplinary cooperation

Andrews (1990) defines interdisciplinary cooperation as occurring "when different professionals, possessing unique knowledge, skills, organisational perspectives, and personal attributes, engage in coordinated problem solving for a common purpose" (p. 175). It is the definition that Berg-Weger and Schneider (1998) use as well, but Bronstein (2003) prefers to adopt the somewhat different approach of Bruner (1991). Bruner (1991) puts more emphasis on the idea that interdisciplinary cooperation allows for the achievement of goals that individual professionals could not reach by themselves. Although we will also use the latter definition in this chapter, much more has been written about what interdisciplinary cooperation truly entails. For conceptual work on this topic, we would like to refer to D'Amour et al. (2005), as an extensive discussion is not needed in the context of what we do here. Interdisciplinary cooperation is a broad term, being associated with a number of specific aspects. In this chapter, we will focus on the five aspects identified by Bronstein (2003): (1) interdependence; (2) newly created pro-

fessional activities; (3) flexibility; (4) collective ownership of goals; and (5) reflection on process. Each of these five aspects has been subject to earlier research on teamwork. We explain them below in line with Bronstein's (2003) definitions.

Interdependence refers to the reliance of professionals on each other (and interactions with each other) to accomplish their goals or tasks. Professionals must have a good understanding of their own roles and those of other professionals to achieve better cooperation (Scott, 1997; Waterhouse and Carnie, 1991). Characteristics of such interdependence include (in)formal time spend with each other and appreciation of one another's inputs and opinions. Team participants must be under the impression that they have more to gain than to loose from cooperating and communicating with colleagues (Mattessich and Monsey, 1992). Carving out professional territories and distributing responsibilities are hence two of the major challenges facing interdisciplinary practice (D'Amour et al., 2005). Interdisciplinary teams have to be aware of the danger of turf wars that may be lingering under the surface (Hudson, 2002).

Newly created professional activities are those activities created by the work of interdisciplinary cooperation that could not have been achieved by individual professionals alone (Mattessich and Monsey, 1992). These activities are often realised in practice, within the boundaries of an organisation within which professionals face interdisciplinary challenges. Examples are primary and secondary schools, where teachers work together with social workers to help pupils or students. Other examples are hospitals, in which medical and social staff members join forces in creating a variety of novel activities for patients and their families.

Flexibility goes beyond interdependence, and relates to behaviour allowing productive compromises in the face of disagreement. Different professional roles are likely to bring about disagreement as to what is the best way to solve a problem or help a client (Billups, 1987). There might be cases where one approach can be argued to be better than the others, and that there is no need for compromise. However, the interdisciplinary nature of the client,

case or issue usually provokes some sort of coordinated joint effort. If the approach of one organisation would have been sufficient, it would have been tackled by that organisation; the issue would not be discussed in the PII team. In order for a compromise to be productive, all professionals involved must be able to reduce or drop their demands when the argument of another professional is stronger. Interdisciplinary teams that create intervention strategies for clients tend to work on an ad hoc basis, and are frequently under pressure to weigh each other's arguments to achieve the best outcome for their clients. In such circumstances, flexibility in search for compromises is a must. Interdependence requires professionals to know their own roles, while flexibility asks for blurring roles. This seems contradictory; however, professionals should know what their role is, in order to understand that working with others is necessary. Once collaboration is initiated, they need to be able to blur roles so that, for example, a police officer can take a more social or healthcare oriented approach to a case. In practise, it is difficult to separate interdependence from flexibility (Mellin et al., 2010).

Collective ownership of goals has to do with the shared responsibility that professionals have in the entire process of goal achievement. This stretches from joint discussion and decision-making, to professionals individually carrying out promises that they have made to the team. Participants from different organisations need to consider the overall mission of the team, and how much they are willing to give in on their individual position to achieve these overall goals (Murphy, 2008). For instance, Mattessich and Monsey (1992) and Wildridge et al. (2004) have found that successful cooperative efforts imply realistic goals and a shared vision, aspects which are implied by collective ownership. Lack of shared goals and overambitious aims are identified as barriers to cooperation (Alper et al., 1998; Sloper, 2004).

Finally, reflection on process relates to the awareness professionals have of what does and what does not work well in the process of collaboration. Rather than 'just' cooperating, they have

to recognise that they are taking part in processes that may have to be optimised. They need to consider the strategies to achieve their overall mission as a team (Murphy and Lutze, 2009). To do so, professionals must discuss their working relationships, and use feedback to make their cooperative processes more effective and/or more efficient. Billups (1987) adds that organising periodic feedback meetings may be useful.

In her work, Bronstein (2003) describes a number of important inputs for successful interdisciplinary cooperation, although she does not provide a clear linkage between the factors that influence interdisciplinary collaboration and the elements of collaboration as we outlined them above. They are grouped into four categories: (1) personal characteristics; (2) professional role; (3) history of cooperation; and (4) structural characteristics. From each of these categories, we have decided to include one exemplary variable in our exploratory study design. Including a larger number of variables would result in a model that cannot be sensibly estimated with a relatively small sample, especially with high correlations amongst variables. Keeping the number of variables small has the advantage that the analysis will be tractable and parsimonious. We could have decided to only focus on one of the categories, but this would then have been an important limitation of our study. Rather, we prefer to explore a relatively comprehensive model, taking into account several aspects of the theory of Bronstein (2003). Making these selective choices may seem like an exercise in 'cherry-picking', but, first of all, all variables that have been chosen have at least been suggested by Bronstein (2003) to be relevant. This list of variables has been narrowed down further, and we will argue below that we have based the choice of our variables on the extant (team) literature or, where no such literature was available, on theoretical arguments as to why we expect the involved variable to be influential.

Firstly, personal characteristics have been studied very broadly in the teamwork literature. How team members view one another outside their professional role is indicative for mutual trust, understanding and respect fostered between individual team mem-

bers or in the team as a whole. This composition of personalities is also what Bronstein (2003) indicates to be an important factor for interdisciplinary cooperation. In the team literature especially the so-called Big Five personality traits are frequently researched individual-level attributes. Here, we will focus on extraversion¹ as a key Big Five personality trait. Generally, extraversion is seen as a desirable trait for professionals, as extravert team members are sociable, talkative and assertive (O'Neill and Allen, 2011). This trait has been shown to be important in teams, although it is usually not preferable to have a team with only extravert members, as this may lead to unnecessary discussions and quarrels because team members all want to be heard and all are leadership-oriented (Barry and Stewart, 1997). In PII teams, we argue that it benefits the team if all members are extravert, more so than any other personality trait, as in this setting members should express their opinion from the perspective of their own discipline and home organisation to come to an optimal solution for their cases. A team member failing to structurally contribute to the discussion, and to the process of problem-solving and decision-making, may not be perceived as cooperative. Moreover, not having the perspective from all disciplines and/or organisations on the table may lead to sub-optimal solutions. We would like to emphasise here that, *ceteris paribus*, any additional extraversion is good for the cooperation. The more extravert a team member is, the more open he/she will be to discuss options for interventions that are available for 'case' (such as a repeat offender), and the more likely a team member will be to have an open discussion about what is best for the case. By increasing extraversion, team members will be able to get closer to a productive compromise and hence improve on interdisciplinary cooperation.

Hypothesis 1. *Extraversion of a team member is positively associated with perceived PII team cooperation.*

¹Initially we also tested for associations between other personality traits and collaboration, but did not find them to be of statistical significance, and thus for the reason of parsimony removed them from the model.

Secondly, the professional role entails, in part, that individuals hold strong ethical and other values related to their profession. For example, interdisciplinary cooperation requires strong professional identity to be successful (Billups, 1987; Corbett, 1998), yet without undermining the understanding toward other professional cultures (Reich and Reich, 2006; Sloper, 2004; Webb and Vulliamy, 2001). The professional role can also involve practical characteristics, such as experience, as inexperienced staff hampers cooperation (Sloper, 2004). We adopt professional autonomy in our design, which we define as the freedom that professionals have to make independent judgements over their work (Bayles, 1981). This specific variable has been mentioned by many researchers in the field to be a great facilitator for interdisciplinary cooperation (Baird, 2012; Botterill and de la Harpe, 2010; McLean, 2007; Mellin et al., 2010; Wittenberg-Lyles et al., 2008; Wittenberg-Lyles and Oliver, 2007). Also, it has been empirically studied before in an interdisciplinary context (Rafferty et al., 2001). Rafferty et al. (2001) examines the professional autonomy of nurses in hospitals, suggesting positive synergy between professional autonomy and interdisciplinary cooperation. Not only has it been tested before, we would also like to argue that professional autonomy, either partially captures or will strongly be related to a number of other professional characteristics. Individuals must have knowledge and experience for their organisation to allow them to make independent decisions.

While professional autonomy is unlikely to play a major role in an 'ordinary' team, it may have substantial benefits in PII teams in which professionals execute their PII tasks away from their home organisations, and hence have to make autonomous decisions in their role of representatives of their home organisation and colleagues. Professionals who are not used to autonomy may find this difficult.

Hypothesis 2. *The professional autonomy of a team member is positively related to perceived PII team cooperation.*

Thirdly, structural characteristics attribute to successful interdisciplinary cooperation. Professionals doing PII teamwork must

have the time and freedom to do so effectively. In terms of time, their caseload has to be manageable (Murphy, 2008), and the time relieved from their primary tasks to meet and work with other professionals should be sufficient. In terms of freedom, they need to have a mandate from their home organisation (Sloper, 2004), as well as sufficient organisational and administrative support (Bronstein, 2003). In Chapter 4, we will study the administrative support further, as well as the time and space professionals have to collaborate. Here we will focus on organisational support, because, even though it is not a characteristic of the team member, this is the home environment offered to the team member. Professionals should not be counteracted by their home organisation at any level (be it strategic, supervisory, or colleagues) when they make and execute agreements reached within the PII team. After all, professionals in PII teams tend to be dependent on colleagues in their home organisation to execute these agreements. Resistance from the home organisation will certainly hinder cooperation, as professionals can then not productively contribute to the PII team.

Professionals experiencing resistance from their home organisation at any level will either not participate actively in the PII team, or will make promises to the PII team that cannot be kept. The structural characteristics of the collaboration may be of more importance for PII teams than for regular teams. A non-interdisciplinary team tends to operate under the same management, which implies that all members face the same structural characteristics. Professionals from different disciplines are more likely to fall under different managers, or even under different organisations, making it more difficult to have good structural facilities in place for all of them. This may be very detrimental to the team's collective performance, as every professional in the PII team is needed to achieve the optimal solution. In contrast, we would expect that professionals who are allowed to make decisions independently struggle less with issues of resistance at their home base.

Hypothesis 3. *Experienced resistance in a team member's home organisation is negatively related to perceived PII team cooperation.*

Fourthly, the history of cooperation refers to experience in interdisciplinary work, and is perceived by Bronstein (2003) to be related to successful interdisciplinary cooperation. Mattessich and Monsey (1992) also report that, in many studies, this is found to be a factor of success. Professionals with more experience in interdisciplinary work may be better trained in those areas that make them successful in cooperating. They may, for instance, have experience with weighing the opinions of others to come to a high-quality decision. Moreover, a selection effect may imply that persons not enjoying interdisciplinary cooperation may try to avoid such collaboration as much as possible, while the opposite may hold true for those who enjoy this kind of activity. Weiss (1987) provides anecdotal evidence that professionals may stay committed to a cooperative effort, because they believe in the concept, even if they could run programmes on their own. We look here at cooperation history of the individual. The more meetings an individual has been part of, the higher the level of (perceived) cooperation will be. This is because the individual with more collaboration history will have more experience in working in the PII team, which is related to the performance of (perceived) collaboration.

Hypothesis 4. *The cooperation history of a team member is positively associated with perceived PII team cooperation.*

Bronstein's (2003) model for interdisciplinary cooperation does not incorporate the impact of interdisciplinary cooperation on team performance. However, other team studies have included output effects (Curci, 2011) - quite a few after developing their own measures of interdisciplinary cooperation and output. Successful cooperation in interdisciplinary teams can have positive effects for individuals participating in such teams. Hudson (2002) proposes that effective interprofessional work can lead to more effective service delivery and user outcomes, but cannot substantiate this hypothesis with data. But indeed, empirical research shows that better interdisciplinary cooperation is associated with, for example, higher-quality care for cardiac patients (de Leval et al., 2000) and

increased quality of care for hospice patients (Parker-Oliver et al., 2005). Specifically, Kim et al. (2010) found that police officers tend to see their partnerships with adult probation agencies as making substantial contributions to the reduction of crime when they co-operate well. Murphy (2008) refers to further empirical studies on police-probation partnerships that offer proof that this can well be related to successes. Sloper (2004) provides a review of studies that look at outcomes of interdisciplinary work, reporting positive evidence, too. The literature suggests that good interdisciplinary co-operation is positively associated with performance or perceived performance. If we continue along the line of the argument regarding the theory and findings of Chapter 2, we would expect the better the management strategy (collaboration in this case) may be related to higher satisfaction on the performance on expectations, here, that is a well-performing PII team.

Hypothesis 5. *PII cooperation is positively related to satisfaction with PII team performance.*

Additionally, we argue that extraversion and professional autonomy may have a direct relation with the satisfaction on PII team performance, as prior work suggests that these variables have a positive relationship with a range of team-related performance measures. Extraversion is expected to be important for job performance in the case of tasks that require frequent cooperation or interaction with others (Barrick and Mount, 1991). Extraverts should be more at ease with communicating PII agreements back to their colleagues in their home organisation. Similarly, Rafferty et al. (2001) show that autonomy is positively correlated with perceptions of higher quality of care delivered. Having professionals directly involved with decision-making does not only facilitate co-operation, but also makes the actual outcomes better, as the cumulative knowledge is maximised to come to an optimal solution.

Hypothesis 6. *Extraversion has a positive direct relation with satisfaction with PII team performance.*

Hypothesis 7. *Professional autonomy has a positive direct relation satisfaction with PII team performance.*

Because we expect direct effects of extraversion and autonomy on PII performance, we will control for the associated interaction effects: That is, extraversion and autonomy may positively moderate (i.e., affect the strength and direction of) the relation between PII cooperation and team performance. We propose that having more extraversion or autonomy in a PII team will benefit the relation between cooperation and performance. A PII team that cooperates well and that has team members who are predominantly extravert or autonomous will be associated more with higher performance than a team with likewise good cooperation, but more introvert and non-autonomous professionals.

Hypothesis 8. *Extraversion positively moderates the relation between perceived PII cooperation and satisfaction with PII team performance.*

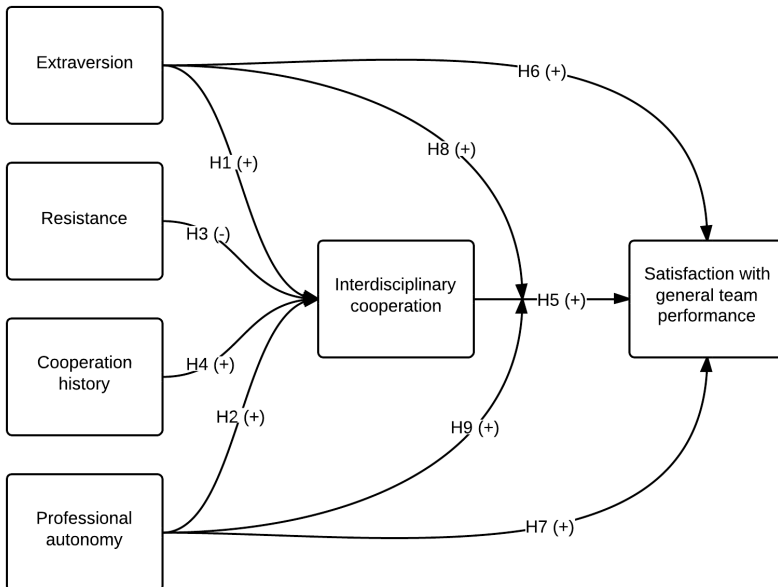
Hypothesis 9. *Professional autonomy positively moderates the relation between perceived PII cooperation and satisfaction with PII team performance.*

Our choice to assume that only extraversion and professional autonomy will have a direct effect on PII team performance, rather than all four variables, follows from what is known from prior empirical work, in combination with the requirement to keep our model parsimonious (given sample size restrictions). To the best of our knowledge, literature indicating that resistance at home may have a direct effect on PII performance is non-existent, as is evidence as to a direct effect of collaboration history. Figure 3.1 visualises the full model, summarising all the hypotheses and their expected signs. The arrows in the model point in one direction, suggesting causality, yet we want to emphasise the correlational nature of this study.

3.2.2 Policy background

For this study, we needed to collect data as to police-related teams with public (P), inter-organisational (I) and interdisciplinary (I) aspects. Public management studies on interdisciplinary teamwork in schools, hospitals and hospices (Webb and Vulliamy, 2001) and inter-organisational studies on police-probation partnerships (Corbett, 1998; Kim et al., 2010; Murphy and Lutze, 2009; Murphy, 2008) have been published, but none focuses on the unique and complex combination of judicial, (mental) healthcare and social professionals. To fill this gap in the literature, we decided to look at the Dutch case of *Veiligheidshuizen* - or Safety Houses, in English. This group of network organisations is highly appropriate for two reasons. First, Safety Houses are quite unique police-related col-

Figure 3.1: Conceptual model



laborative arrangements between judicial, care and social organisations. These network organisations deliver a number of public goods by bringing together a group of professionals from different disciplines and organisations. Second, across the country, these Safety Houses are very similar, in the sense that judicial, (mental) healthcare and social partner organisations always participate in these collaborative network arrangements.

The Dutch Safety Houses were established in the 1990s, when neighbourhood safety increasingly asked for cooperative and local responses (Graham et al., 2012). Dutch Safety Houses were introduced around 1997 in the context of an initiative called *Justice in your Neighbourhood* ("Justitie in de buurt") in a few Dutch regions. Today, about forty Safety Houses operate across the country, serving all Dutch regions. The initial main aim of Safety Houses was to form a closely-knit cooperative network to treat predetermined client groups or offenses, such as repeat offenders, young criminals, domestic violence and ex-convicts. Recently, however, the Safety Houses' proposition started to increasingly shift toward allowing any case, as long as the client involves a complex multi-problem challenge. The Dutch Safety Houses' approach is unique, as multiple interdisciplinary stakeholders systematically work together on offender-oriented solutions in a formal setting. The partners come from both the judicial and the social field, and include the police, public prosecution, parole agencies, child protective services, municipalities and mental healthcare services.

Safety Houses aim at preventative as well as repressive remedies. For each and every client, an integrated treatment plan is designed, which tries to solve acute problems, but also seeks to prevent future criminal or other deviant behaviour. Safety Houses offer physical facilities for professionals to meet and discuss their target group. These meetings are called *casusoverleggen* - or 'case meetings', in English. During these meetings, individual clients or 'cases' are discussed. For each target group, usually one periodical case meeting is scheduled, although sometimes more of such meetings are organised. For example, one meeting may be booked

to discuss offending minors with police and youth organisations, followed by another meeting where the public prosecutor joins to discuss the penalties for these offenders.

Because Safety Houses are designed to suit local needs, they are not identical across the country. What is important in the context of the current study, though, is that essential core features are similar across all Safety Houses, reflecting their PII collaborative character. For one, each Safety House may target other types of high-risk clients, suiting their local safety needs, although issues related to serious and organised crime are always referred to other agencies. Furthermore, the physical presence of professionals is very diverse across Safety Houses: In some, professionals only meet weekly to discuss a number of clients and then return to their own organisations; in others, all professionals from a wide range of home organisations have their own workspace, allowing them to execute tasks for both the Safety House and their home organisation. All Safety Houses strive to have the same individuals participate continuously, but individuals are usually replaced by home organisations in case of sick leave or turnover. Although the Safety House may seem close to an organisation or institution itself, it is only a collaborative effort. The exclusive basis is a steady set of professionals from different organisations collaborating, to exchange information and to come to optimal solutions. The Safety House can support these efforts, but has no steering influence as a regular organisation or institution would have. Because we can speak of relatively fixed sets of individuals from different disciplines and organisations working together, the case meetings in Safety Houses are a very good examples of PII teams.

3.3 Methods

3.3.1 Research design

A research design shows how one intends to identify the causal effect of an independent variable on a dependent variable. We would

like to show that there is a causal relationship between our independent variables and the variables of interest: perceived collaboration and satisfaction concerning performance. Ideally, we would conduct a randomised experiment (with a sufficiently large number of participants), where an experimental variation is created for the independent variables. In that case, if we see any difference in the outcome variables, then we can conclude that the relation is causal, because the independent variable is the only thing different between the control and treatment groups. Now, this is unfortunately not feasible in this study. We study teams as they are, rather than subjecting them randomly to conditions. Although it would have been interesting to do an experiment, it would have been very difficult to achieve random distribution over control and treatment groups. We cannot simply introduce a variable like extraversion to a group like we could introduce music, or a coloured light. People are extravert to some extent, or they are not. We could have taken two random groups and could have introduced one extrovert person to one group, and an introvert person to the other group, as our argument is that a PII team will benefit from even one additional extrovert team member. Then still, extraversion of this one person is still not likely to be exogenous. Extraversion is probably related to a number of other things that might also influence collaboration, like managing interpersonal relationships.

Because we deviate from the golden standard of an experiment, it means that we struggle with a number of issues that make it very difficult for us to make causal inferences about our study. We observe PII teams in their natural setting, and that natural setting is highly unlikely to be random. There may be characteristics of team members that we do not observe, but which could be important. Because we do not take these unobserved characteristics into account, we may be over- or underestimating the effect of the independent variables on the outcome variables. As can be seen below, we will try to restrict a number of issues. We have added controls that we find theoretically to possibly have an effect on the outcome variable, in an attempt to deal with the omitted variable bias. How-

ever, we cannot be sure these controls are responsible for all unobserved variation; most likely, they are not. As we make use of a cross-sectional design, we cannot benefit from the estimation techniques that can be used with panel data, mostly in terms of coping with omitted fixed effects.

Hence, as we find the research design to be far from perfect, we will not make any causal inferences about our findings, and (still carefully) treat the findings of this correlational study as mere associations between the variables of interest. This does not mean, however, that work of this nature has no merit on its own. Explorative studies like these pave the way for further research, as associations can suggest which variables may be of the greatest interest or relevance. We will discuss the implications of the weaknesses in our research design in the discussion of this chapter.

3.3.2 Data

The data were collected through online surveys. As there are relatively few Safety Houses (42) in the Netherlands, we decided to target all of them. By email, the managers of all Safety Houses received a request to forward the survey to all participants of all case meetings in that specific Safety House. A total of 204 people started the survey. For different reasons, such as length of the survey or because potential respondents turned out not to be in the target group, not all distributed surveys were completed. Eventually, we could create a dataset with 185 respondents from 47 different case meetings in 21 Safety Houses. How many individuals participate in total in Safety Houses' case meetings is unknown, but we estimate that the grand sum country-wide count will be in the 1,000 to 2,000 persons range. Hence, the overall response rate is normal to good for online surveys, and the number of Safety Houses included in the sample (approximately 50 per cent) is very satisfactory.

3.3.3 Measures

We developed an online survey with fifty questions, based on Bronstein's (2003) model, other teamwork literature, and pilot interviews with individuals working in Safety Houses. Given the length of the survey, we have included the English translation of the full survey in Appendix B for those interested. The original Dutch survey is available upon request.

Interdisciplinary cooperation is measured with an adjusted version of the Index of Interprofessional Cooperation (Mellin et al., 2010), to suit our target group. The internal consistency of this adjusted index is very good with a Cronbach's alpha of 0.8942. Overall, the sub-scales reveal moderate to high consistency, with Cronbach's alpha reliability scores of 0.8725 for professional flexibility, 0.7002 for role interdependence, 0.7893 for newly created professional activities, and 0.8413 for reflection on process. These scores are lower than the outcomes of the original study, but very acceptable for interdisciplinary cooperation indices (Wittenberg-Lyles et al., 2007).

We use the 30-item scale measuring the Big Five personality traits of Vermulst and Gerris (2006), and extracted the *Extraversion* items from the data, which we averaged for every respondent. The internal consistency of this adjusted index is high with a Cronbach's alpha of 0.8764. The sub-scales reveal moderate to very high consistency, with Cronbach's alpha reliability scores of 0.8645 for extraversion, 0.7909 for openness, 0.8568 for agreeableness, 0.9154 for consciousness, and 0.7265 for emotional stability.

We measure *Autonomy* by means of a scale with five items (Meiksins and Watson, 1989). Respondents had to indicate on a four-point Likert-type scale (ranging from never to always) how often they:

1. decide when they come/leave work;
2. keep time of their projects;
3. decide when and how to go about their job;

4. can obtain the resources they need without permission; and
5. can influence which project they work on.

The Cronbach's alpha reliability score of this scale is 0.45, which is unacceptably low (Kline, 2000). By means of an explanatory factor analysis, we found that the second item loads onto another factor than the other three, but removing this item still did not increase the reliability to a sufficient level of at least 0.7. Therefore, we decided to take one item out of the scale as our measure for professional autonomy - i.e., the third item: 'How often do you decide when and how to go about your job?' This item covers work process autonomy, which we expect to be of greatest importance. It allows professionals to be flexible, and to exploit their creativity in the process of coming to an optimal client solution. It is a relatively narrow and unambiguous question (Sackett and Larson, 1990; Wanous et al., 1997). We therefore presume, with some caution, that this third item provides an appropriate measure for our purposes.²

Respondents were asked how often they perceive *Resistance* in their own home organisation when they try to communicate and/or execute agreements that have been made during the case meeting of the PII team. Respondents were asked to provide an answer on a scale from 1 (never) to 5 (always). Since a scale or construct for this variable is not available in the literature, we decided to use a question that we found to be very much at the heart of experienced resistance in our pilot interviews with PII team members. Although, in theory, home organisations should be supportive, because they have become part of the network in the first place, professionals often do not experience the support when they try to execute agreements. Hence, we asked to provide an answer to the following narrow and unambiguous question (Sackett and Larson, 1990; Wanous et al., 1997): 'How often do you experience resistance

²The use of single item scales does not necessarily have to be problematic. They are best used for concrete and singular (Rossiter, 2002) or narrow and unambiguous issues (Sackett and Larson, 1990; Wanous et al., 1997).

when trying to execute agreements made with the PII team?’

Cooperation history is an estimate obtained by approximating the number of meetings a team member has joined, based on the tenure of the respondent (in years), the average number of meetings per year, and the percentage of meetings attended by the respondent. All these figures were subjectively guesstimated by the respondent.

Respondents were asked to rate their satisfaction with the *General performance* of their PII team on a five-point Likert scale. By way of robustness check, we included a number of other performance measures in our online survey. Factor analysis reveals that these all load onto a single factor, indicating high correlation amongst different performance measures. Using any one of them, or a composite measure, produces similar results. These robustness analyses are available upon request.

Finally, we included a set of control variables. As is common in team studies, we control for a number of demographics of the PII team (Tsui and O'Reilly, 1989). We have added controls for the *gender*, *age* and *level of education* of the respondents. *Age* is measured in years. *Education* has four answer categories: secondary education, vocational training, higher vocational training, and university degree. *Gender* is coded 0 for males and 1 for females.

3.3.4 Analysis

We apply path analysis in the form of a series of Ordinary Least Squares (OLS) regressions, using Stata 12. A path analysis is like a structural equation model, but without the latent variables. Several equations are simulated simultaneously in this model, creating measures of model fit, or explained variance for the full model. Stata 12 reports direct and indirect effects, as well as total effects and their standard errors. We estimate the standard errors using the Huber-White sandwich estimators.³ Such robust standard er-

³By way of robustness check, we have also run the model with clustered standard errors of the respondents by the team they are in, but found this to be of no influence on the results.

rors are appropriate when the data are associated with minor concerns about failure to meet the standard OLS assumptions, such as non-normality, heteroscedasticity, and few observations exhibiting large residuals, leverage or influence. We will estimate the following equations simultaneously in one model:

$$\begin{aligned} & Interdisciplinarycooperation(i, t) = \alpha + \beta_1 Extraversion(i) \\ & + \beta_2 Autonomy(i) + \beta_3 Resistance(i, h) + \beta_4 Cooperationhistory(i) + \\ & Controls(i) + e \end{aligned}$$

and

$$\begin{aligned} & Performance(i, t) = \gamma + \delta_1 Interdisciplinarycooperation(i, t) \\ & + \delta_2 Extraversion(i) + \delta_3 Autonomy(i) \\ & + \delta_4 Interdisciplinarycooperation(i, t) * Extraversion(i) \\ & + \delta_5 Interdisciplinarycooperation(i, t) * Autonomy(i) + Controls(i) \\ & + e \end{aligned}$$

(With t being team, h being home organisation and i respondent)

A final methodological remark relates to our single-respondent design. Because all data are self-reported and all data are collected through the same questionnaire during the same period of time with a cross-sectional research design, common-method variance (CMV) may cause systematic measurement error, further biasing the estimates of the true relationship among our theoretical constructs. CMV involves variance that is attributed to the measurement method rather than the constructs of interest. Method variance can either inflate or deflate observed relationships between constructs, thus leading to both Type I and Type II errors (Podsakoff et al., 2003). We took precautionary measures to prevent CMV, such as guaranteed anonymity for respondents (Chang et al., 2010a). Moreover, it is very unlikely that respondents' implicit theories include the interaction effects of Hypothesis 8 and Hypothesis 9. After data collection, Harman's one-factor test was conducted on all questionnaire items to check for a potential common-method effect. The result from the factor analysis is that the majority of the

survey questions load onto five factors with respective proportions of variance of 13.89 per cent, 11.39 per cent, 10.11 per cent, 8.83 per cent and 7.20 per cent. Hence, none of the factors is responsible for the majority of the variance. From this, we can conclude that the data are unlikely to suffer from a common-method bias.

3.4 Results

Table 3.1 shows the descriptive statistics. We have 185 observations, which is sufficient to run a regression analyses, given the number of variables included in our parsimonious model. The proportion of females is large (74%). Because we cannot know the characteristics of our target population exactly, it is difficult to say whether or not our female-dominated sample is representative. However, as many organisations in (mental) healthcare and social work are involved in Safety Houses, with way more female than male employees, the large proportion of women in our sample does not come as a surprise. The low standard deviation as to education signals that the majority of our respondent has a similar educational level: i.e., higher vocational training. This is expected as vocational training is appropriate, given the practical nature of the job. Within our PII teams, most respondents are around 45 years old. This is in line with our expectations, given the fact that most professionals must have quite some experience in their own job to be a good network collaborator.

In terms of professional autonomy, on average, respondents can 'sometimes' determine how and when to go about their job: Because most of the respondents work at an operational level (there are almost no managers among our respondents), many will be dependent on a supervisor to make more important decisions. The mean respondent does score quite high on extraversion. Again, this is as expected, given the jobs that most professionals do: They tend to work with people. Our respondents indicate that they, on average, only sometimes experience resistance; interestingly, how-

Table 3.1: Descriptives

	Mean	SD	Min	Max
Gender	0.74	0.44	0.00	1.00
Age	44.60	10.33	21.00	67.00
Education	2.03	0.50	1.00	3.00
Extraversion	5.49	0.97	2.17	7.00
Autonomy	2.95	0.75	0.00	4.00
Resistance	2.02	0.89	1.00	5.00
Cooperation history	139.89	231.31	0.00	1817.00
Interdisciplinary Cooperation	3.66	0.45	1.34	5.00
Performance	3.75	0.68	1.00	5.00
Observations	185			

ever, some professionals do so all the time. The average respondent has participated in 140 meetings, but variation is substantial. Interdisciplinary cooperation and general performance are, on average, given a passing grade; and looking at the variance, most people give a pass. Again, however, the range goes from very poor cooperation and performance to excellent scores on cooperation and performance. All in all, the diversity of Safety Houses and case meetings, and hence the variance in the data, seem to be worth exploring further with regression analysis.

Table 3.2 provides the bivariate correlations between variables in our data, including their (in)significance. We observe a significant relationship between cooperation, on the one hand, and autonomy and extraversion, on the other hand, but the correlations are not very strong. Moreover, the males in the sample tend to be older, and extraverts tend to report higher professional autonomy. Evidence of bivariate multicollinearity, which would frustrate regression analyses, is lacking. We tested for multivariate multicollinearity by calculating the variance inflation factor (VIF). We found the VIF value to be far below the threshold of 10 for all variables (and

Table 3.2: Correlations

	1	2	3	4	5	6	7	8	9
1 Gender	1								
2 Age	-0.31*	1							
3 Education	0.12*	-0.11	1						
4 Extraversion	-0.04	0.06	-0.06	1					
5 Autonomy	-0.1	0.02	-0.06	0.15	1				
6 Resistance	-0.16*	0.11	0.00	0.12	-0.04	1			
7 Cooperation history	-0.1	0.18*	0.02	0.04	0.1	0.01	1		
8 Interdisciplinary Cooperation	0.02	0.04	-0.02	0.13	0.23*	-0.1	0.13	1	
9 Performance	0.11	0.01	-0.01	0.07	0.14	-0.13	0.12	0.58*	1

*** p < 0.001, ** p < 0.01, * p < 0.05

1.10, on average).

We estimated four different models. The results can be found in Table 3.3.⁴ The number of observations, R^2 , AIC and BIC noted at the bottom of the table are for the full model, as the path analysis estimates the two equations simultaneously. Model 1 only contains our control variables, and Model 2 all variables, except for the interaction effects, as well as extraversion and autonomy in the performance regression. In Model 3, we exclude only the interaction effects; in Model 4, all variables are included. Model 4 gives the best fit in terms of R-squared: The interaction terms contribute nicely to the explanatory power of the model. We also base the preference of Model 4 on the Information Criteria, not solely on the R^2 , as the R^2 always increases as more variables are added to a model. The AIC and BIC are greatest for Model 4, meaning that this is the most parsimonious model. A Model is only an approximation to the real world; the goal of research is to create simple models that have satisfactory explanatory power. In social sciences, there can often be many explanations to a phenomenon, and simple yet powerful models are not available. By means of information criteria one can make a trade-off between the power of the model and the number of simplifying assumptions made about the world. Although we build a model on the basis of theory, we test it empirically to see if it holds. If a certain variable offers only a meagre contribution, then we prefer the more parsimonious option. However, in this case, the full conceptual model is also the preferred parsimonious model.

The control variables do not have a significant contribution in our models. They are not statistically significant, and a model with only control variables produces a very low R-squared. Extraversion has a positive and significant association with interdisciplinary cooperation. For autonomy, the relation is marginally significant. H1 and H2 are therefore supported. The negative and marginally sig-

⁴Equations were estimated simultaneously, giving overall results for the number of observations, R^2 , AIC and BIC. Despite the term *direct effect*, we must emphasise the correlational nature of our study.

Table 3.3: Direct effects of variations of the conceptual model - explained variance in cooperation and performance

	Model 1	Model 2	Model 3	Model 4
DV: Interdisciplinary cooperation				
Extraversion		0.070*	0.070*	0.070*
Autonomy		0.102*	0.102*	0.102*
Resistance		-0.067~	-0.067~	-0.067~
Cooperation history		0.000	0.000	0.000
Education	0.045	0.068	0.068	0.068
Age	0.001	0.001	0.001	0.001
Gender	-0.043	-0.047	-0.047	-0.047
DV: Performance				
Interdisciplinary cooperation		0.902***	0.873***	0.899
Extraversion			0.013	0.727
Autonomy			0.05	-1.279*
Interdisciplinary cooperation*Extraversion				-0.192
Interdisciplinary cooperation*Autonomy				0.368*
Education	0.094	0.049	0.049	0.053
Age	0.004	0.004	0.004	0.002
Gender	0.099	0.171	0.179	0.176
Observations	126	120	120	120
R-squared	0.018	0.142	0.147	0.187
AIC	1619	4079	4082	4661
BIC	1647	4121	4130	4714

*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.1

nificant relation between experienced resistance and cooperation provides support for H3. However, the relationship between cooperation history and collaboration is insignificant: Hence, we have to reject H4.

We continue with the second part of the regression: The direct effects of our variables on team performance. Here we find mixed results. We find that collaboration is positively and significantly associated with performance in Models 2 and 3: Hence H5 partially is supported, as we do not find a significant relation in our preferred Model 4. Extraversion is not significantly related to performance: So, H6 is not supported. Moreover, autonomy is negatively

and significantly associated with performance: We therefore must reject H7.

Our interaction effect of cooperation with extraversion is not significant. We reject H8: i.e., we do not find that extraversion affects the relationship between PII team cooperation and performance. In contrast, the interaction effect of collaboration with professional autonomy is significant: Autonomy increases the strength of the relationship between PII team cooperation and performance. Thus, we find support for H9. By means of marginal effect plots (Johnson and Fay, 1950), we can gain deeper insights. Such plots demonstrate the effect that the moderator variable has on the coefficient of the relationship between the PII team cooperation and performance for different levels of the moderator variable, keeping all other variables in the model at their mean.

Figure 3.2 demonstrates the conditional marginal effect of autonomy on the relation between interdisciplinary cooperation (ic) and performance. The shaded area shows the confidence interval (CI) of the coefficient, which should either be fully above or fully below zero for the moderation to be significant. It can be seen that the beta coefficient for the relation between cooperation and performance increases with higher levels of autonomy, implying that the effect of cooperation on performance increases with higher levels of autonomy. Although overall significant, this is not the case for low levels of autonomy, where the confidence interval stretches both below and above zero.

3.4.1 Total and direct effects

A path analysis provides information about the total effects (i.e., the effect of an independent variable on a dependent variable whilst accounting for simultaneity in the system) and indirect effects (i.e., the total effect minus the direct effect). From Figure 3.2, and Table

Figure 3.2: Moderation of autonomy and cooperation

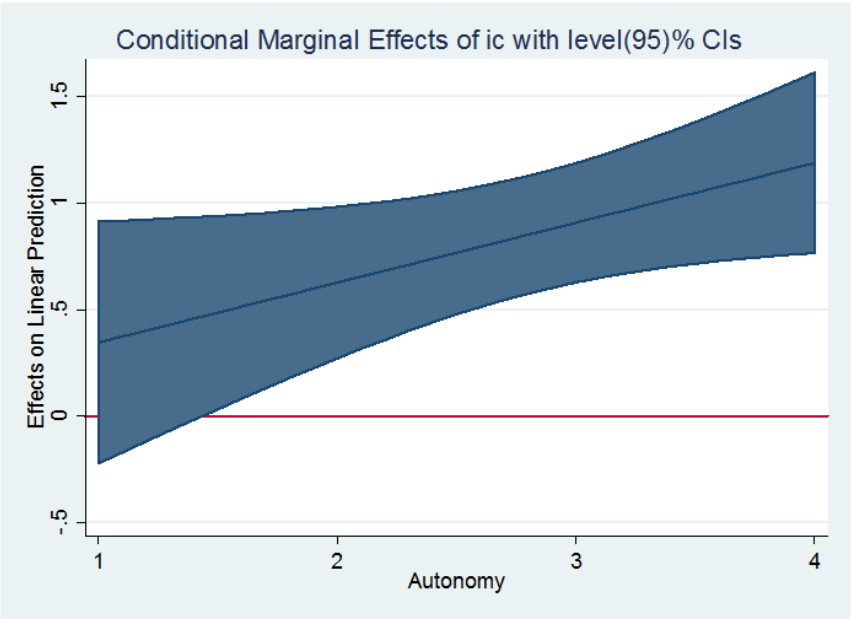


Table 3.4: Indirect effects of Model 4

Indirect effects on General Performance	
Education	0.061
Age	0.001
Gender	-0.042
Extraversion	0.063
Autonomy	0.092
Resistance	-0.060
Collaboration history	0.000
Observations	120

3.4 and 3.5, two conclusions can be drawn.⁵

⁵Because we do not expect any problems with the standard errors of our analysis, and because these explorative results do not warrant robustness checks, we do

Table 3.5: Total effects of Model 4

Total effects on General Performance	
Interdisciplinary cooperation	0.899
Education	0.114
Age	0.003
Gender	0.133
Extraversion	0.790
Autonomy	-1.187*
Resistance	-0.060
Cooperation history	0.000
Interdisciplinary cooperation*Extraversion	-0.192
Interdisciplinary cooperation*Autonomy	0.368*
Observations	120

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

First, extraversion, autonomy and resistance all have significant relationships with cooperation, and cooperation has a positive significant relationship with performance. However, there are no direct effects of extraversion, autonomy and resistance on PII team performance. Second, autonomy is by far the most powerful variable in our analysis. It does have a significant direct positive effect on cooperation, and a direct negative effect on PII team performance. The total effect (direct + indirect) of autonomy on performance (-1.187) is significant and negative, too, as the direct negative effect (-1.279) is much larger than the indirect positive effect (0.092).

3.5 Discussion

In this chapter, we have looked into a special and emerging type of team: PII teams - interdisciplinary and interorganisational teams that work in the public sphere. The aim of this chapter was to find

not add bootstrapped results.

the inputs associated with successful cooperation and perceived performance. Looking at our four variables (cooperation history, resistance, extraversion and autonomy), we found mixed results. First, cooperation history is not significantly related to cooperation, or to team performance. The level of interdisciplinary cooperation is significantly associated to PII team performance in two of our models, but its statistical significance disappears when we add the interaction effect between autonomy and cooperation. Hence, our hypothesis was not fully supported. Second, PII team members who experience less resistance from their home organisation are more positive about cooperation in their case meeting. Third, we found extraversion to be a relevant personality factor to correlate with the team member's perception of cooperation, but not with satisfaction concerning performance. The more extravert respondents are, the better they think about cooperation in their PII team, but there is no significant relation between extraversion and overall perceived team performance. Fourth, autonomy is positively related to interdisciplinary cooperation, but in the end negatively to team performance. This is a puzzle indeed, as this implies that interdisciplinary cooperation increases with increased autonomy of professionals, but overall team performance declines. Although this negative effect vanishes somewhat at higher levels of autonomy (due to moderation effects), the total effect of autonomy on team performance is negative. We did not expect the negative relation, given the positive relation with autonomy in more common team settings studied in the literature.

It is mere speculation, but the positive link between autonomy and collaboration, combined with the negative link between autonomy and performance may suggest that autonomy inhibits critical deliberation. Another suggestion would be that possibly, in PII teams, professionals with much autonomy struggle to convince colleagues in their focal organisations that they should execute the agreements they have made in the PII team. That would mean that there is a perverse effect: As the professional has more autonomy in the PII team, the connection to her or his 'home' team is weaken-

ing. Then, colleagues from the focal organisation may not be willing or may not be able to execute the agreements made in the PII-team, which hampers the overall effectiveness of the team. However, we have no evidence for such mechanisms at hand. Other research would have to be executed for further enquiry. However, we found support for most of the other variables from the Bronstein (2003) model that we studied. This could be an indication that Bronstein's theories are applicable to a wider field of professional collaborations that includes members from organisations in policing, the judiciary and probation. Apart from the wide applicability to different organisations, the theory is also very convenient to studying teams that are very dissimilar in terms of how often they meet and what issues they discuss.

3.5.1 Limitations and future research

As any other study, ours is not without limitations. The research design is not optimal. Our findings were not based on an experiment with randomised trails. Rather, we studied PII team members in their natural environment. Extraversion is a difficult variable to measure combined with giving ratings to collaboration. We argued that the extraversion of a person contributes to collaboration, but in fact, the relation between extraversion of a person and the rating (s)he gives to collaboration may be psychological. We cannot exclude that extraversion is associated with how positive someone is about collaboration. Extraverts tend to be more positive about interpersonal relationships (Brees et al., 2013), which is a relevant observation for our work on teams. Another problem here is the selection bias that may have occurred. It may well have been that relatively extravert respondents have been selected, because a lot of the jobs that PII professionals do involve working with (difficult) clients, and introvert people are probably not as likely to go into this line of work as extroverts are. Apart from that, we cannot assume extraversion to be exogenous. It may be related to other variables of interest that we have not observed. Extrovert team members may be better intra-team communicators (Bradley

and Hebert, 1997), and therefore possibly perceived by the team to be an open and committed team member. This will probably also be positively correlated with perceived collaboration and performance, possibly causing us to overestimate the effect of extraversion on performance here. As this may be the case for other variables, we have to abstain from making causal inferences about our findings, and have done so by merely talking about associations, relations and correlations, rather than causal effects. Beyond the fact that we cannot establish causality in this study, we also cannot exclude reverse causality. It is unlikely that collaboration or performance would have an influence on variables such as extraversion, as personality is supposed to be quite stable for adults. However, it could be that satisfaction of collaboration and performance may influence the history of cooperation, instead of the other way around. People who are satisfied may hang around, rather than satisfaction occurring because people have been around for a long time. Either way, as we did not find any association between cooperation history and collaboration, this is not a crucial concern here, but it should nevertheless be noted.

Our limitations all point to promising future research avenues. To evaluate (perceived) public sector performance in any way, the use of objective measures is often not satisfactory or all-encompassing. This is not different for our case of police-involved PII teams. Eventually, we chose to go with a fairly general measure: the satisfaction with the performance of the case meeting. The interprofessional cooperation index has been successfully applied in prior work (Mellin et al., 2010), so we trust this to be a good and specific measure. However, to come up with a valid perceived performance measure is extremely difficult in the case of teams involving multiple disciplines and multiple organisations. Interviews with managers at Safety Houses revealed that a common perception of goals is simply non-existent. Some feel that Safety Houses should increase (the feeling of) safety in their regions, whereas others indicate that all that matters is helping clients. This pair of outcomes can, in fact, be contradictory, such that asking respondents their sat-

isfaction on these two issues might also not be a valid measure. It would however also be complex to measure this more objectively, as the feeling of safety is influenced by many other variables, even such mundane ones as the absence or presence of street lanterns. To find out whether clients are actually helped by the Safety House would require a cohort study with an appropriate control group. Either way, even when agreement as to the set of objective performance measures could be reached, an experimental study would be required with a sufficient amount of participants to assure that subjects are indeed randomly distributed over a treatment and a control group.

Very little is known academically about the functioning of PII teams. There is still a world to be explored to deepen our understanding of what drives such teams' effectiveness, a world into which we will take a next step in Chapter 4. Further insights will offer a toolkit of effectiveness-enhancing policies, making running such team more attractive from the perspective of public agencies. More and better functioning interdisciplinary interorganisational networks may well boost the overall performance of the public sector, including policing. Therefore, we recommend that more studies are done on this special type of teams in order to check the robustness of our results, as well as to look for other variables that may be crucial to the cooperation and performance of PII teams, such as those suggested in our literature review. This line of work is both rewarding and challenging, as collecting high-quality data of a large enough sample of PII teams is anything but easy. Although our sample was satisfactory for explorative purposes, a larger sample may allow for more complicated modelling, and hence for gaining deeper insights.

Another suggestion for future research would be to study how PII team members operate in their home organisations. We explained that PII members will often not be able to execute all the agreements they make in the PII team themselves; they will often have to delegate tasks to colleagues in their home organisation. How successful professionals are in doing this may be associated

with better cooperation and performance of the PII team, because the PII team will get frustrated if agreements do not get carried out and vice versa. It would be very interesting, for example, to use network theory and look at the networks of professionals in their home organisations. PII team members may have to reach out to their network to get a job done. Their position in the network may influence how (successfully) they go about this.

3.5.2 Policy implications

From our findings, we have to be careful to make implications for policy or management, because the study is merely correlational, implying that making causal inferences would not be appropriate. We have taken some first exploratory steps in studying variables that may cause successful cooperation and performance. We have found a number of associations that are both statistically significant and that could have practical value as well. We would encourage future research to further investigate those variables that we have found to be associated with the outcome variables of interest. Future research may take an interest in resistance perceived by professionals. Our data shows that most resistance is perceived to derive from direct colleagues of PII team members, which may also be an interesting finding for organisations participating in public interdisciplinary networks. Even when management is fairly supportive towards participation in the network, this may not naturally follow through the rest of the organisation.

Chapter 4

Structural characteristics and interdisciplinary cooperation in safety networks^{*}

The CIA sharing a meal with the FBI. Now, if that isn't inter-agency co-operation, I just don't know what is.[†]

Abstract

This chapter investigates which structural characteristics a network administrative organisation (NAO) can offer to contribute to cooperation of institutionalised public interdisciplinary interorganisational teams. We use self-reported data from a survey among team members, and apply regression analysis to derive our findings. We find that frequency and duration of meetings organised by the NAO to be positively related to cooperation. Furthermore, a skilful chair in the meetings is positively related to cooperation as well, while disagreement about the skilfulness of the chair does not affect cooperation or the relationship between the mean skill and cooperation. We also found that the number of hours that professionals spend at the network location is positively associated with the cooperation level of teams.

^{*}This chapter is the result of joint work with Arjen van Witteloostuijn and Arjan van den Born.

[†]Sheldon Jeffrey Sands (Johnny Depp), in *Once upon a time in Mexico* (2003).

4.1 Introduction

In Chapter 3 we started our investigation into collaboration as a stakeholder management strategy. As we report in Chapter 2, the key stakeholders of the police are often of a mixed-blessing nature, implying in theory that collaboration is the optimal strategy for the greatest stakeholder satisfaction. Furthermore, collaboration can help the police and its stakeholders accomplish tasks that they may not be able to (optimally) execute by themselves. In doing so they can improve their services to other stakeholders, making them more satisfied as well. For example, by collaborating with the public prosecution, suspects can be prosecuted, and convicted on the evidence that the police has gathered. Collaboration success depends, however, not only on the inputs of one partner; it is a joint effort.

The police will often find themselves collaborating with public organisations in other disciplines to solve complex problems that cannot be tackled by a single organisation. This requires interdisciplinary and interorganisational cooperation in a multi-agency network context, but such cooperation can be very difficult. Unlike private organisations, public organisations do not merely care about producing *outputs*, but rather about *outcomes* of which the value is difficult to measure (Scholes and Johnson, 2001). Furthermore, collective goals of the overall multi-agency network may sometimes be conflicting with the primary goals or core tasks of a single organisation, implying that public organisations have to question whether they will seek to serve solely their own interests, or those of others as well.

In Chapter 3, we introduced different streams of literature that are related to the study of these contexts. On the one hand, literature focuses on the organisational level, looking at public network formation, governance and functioning. On the other hand, the work in the stream of research in interdisciplinary cooperation focuses rather on the individuals who are operationally involved in the collaborative effort. Because the success of collaboration is found to

be related mostly to the characteristics of individuals, this was the level we focused on in Chapter 3, using the literature on interdisciplinary cooperation as a guideline. We defined the individuals participating in the joint effort as an Public Interdisciplinary Interorganisational (PII) team, and as such complemented our hypotheses with literature from research on teams. Yet, we cannot ignore that behind the individuals working together in an interdisciplinary effort, there is a network of organisations that also plays a role in the collaboration. Bronstein (2003) argues that, apart from the characteristics of individuals participating in interdisciplinary efforts (studied in Chapter 3), structural characteristics, such as administrative support, also facilitate interdisciplinary cooperation. When interdisciplinary cooperation occurs within one organisation, it is clear that this organisation is the one to provide structural characteristics. When it concerns a network of organisations, this is not so clear.

Here we would like to make a bridge to the literature of network governance. In terms of network governance, theory and empirical literature have emerged that deal with optimal public multi-agency network governance in given circumstances. For example, theory by Provan and Kenis (2008) explains how the optimal form of network governance depends on trust, the number of participants, goal consensus, and the need for network-level competencies. When there are few participants and when both trust and goal consensus are high, the best option is usually that the involved organisations share governance. When there are a larger number of participants, having one lead organisation will be preferable, as it will be difficult to steer the network with too many captains at the helm. This requires, though, that all organisations trust the lead organisation, because the lead organisation will probably gain a stronger position, also in determining the goals of the network. When trust amongst parties is not large or when the network is highly centralised, it is preferable to have an independent entity to steer the network, which is commonly referred to as a Network Administrative Organisation (NOA). A NOA is a form of institution-

alisation of the network, which is aimed to govern and facilitate cooperation. Indeed, in networks with many parties that have different and (potentially) conflicting goals, agendas and cultures, designing and implementing an effective NAO is the preferred mode of governance.

Yet, while the focus of the literature is often on governance, we expect in line with the literature on interdisciplinary cooperation that a NOA can do more than taking care of administrative tasks; indeed, in practice, a NOA is often much more than an administrative agency. When a NOA comes about because of shallow trust between parties, evidently this can also reflect upon the professionals who participate in this network cooperation. They may be distrustful, too, having to build relationships and having to learn how to work together. A NOA can design structures, implementing the associated devices, in ways that facilitate cooperation. What a NAO should offer in terms of such structural characteristics to facilitate cooperation has, however, not been empirically assessed before. Note that our use of the term 'structural characteristics' is in line with the broader literature on the topic of interdisciplinary cooperation. It should not be confused with 'structure' in terms of governance of the network. We define structural characteristics as those attributes or actions in the operational sphere that are aimed at facilitating and enhancing cooperation in the network, or cooperation of teams within the network.

Facilitating cooperation is important, because cooperation between several agencies and disciplines may be associated with greater satisfaction (as we found in Chapter 3) and better outcomes in the context of many issues that are key to the public domain. By working together, agencies can provide more 'seamless' responses to the needs of 'clients' or the general public. Within the safety domain, this has been recognised for the case of adolescent clients (Webb and Vulliamy, 2001), but also for persons with a tendency toward criminal behaviour (Murphy, 2008). Additionally, apart from generating operational successes, cooperation looks great to the public eye (Gilling, 1994), making cooperation easy to legitimise

in national and regional communities. However, multi-agency cooperation is easier to advocate than to practise (Weiss, 1987). Everybody seems to think cooperation is great, yet research indicates that many cooperative relationships lack durability and often do not work in practice (Stead et al., 2004). The current study therefore aims to investigate one of the critical facets of creating good cooperation: structural characteristics, as defined above.

When the characteristics of the professionals and the organisations are given, what can NAOs offer in terms of structure to improve cooperation in these collaborative teams?

This chapter contributes to the literature in a number of ways by studying Dutch so-called Safety Houses, which are examples of networks with NOAs in place, where a variety of disciplines and organisations collaborate to deal with offenders. Such Safety Houses are physical locations that host what can be referred to as public interdisciplinary inter-organisational (PII) teams, which are individuals from different organisations working together to achieve common goals. This study is, to the best of our knowledge, the first that explores how the NOA can assist in terms of structural and operational facets, on top of and beyond governance aspects, that facilitate cooperation between professionals from different agencies and disciplines. Moreover, we contribute to the state of the art by studying the structural characteristics that may support interdisciplinary team cooperation in an inter-organisational setting. While the literature on interdisciplinary cooperation is not new, prior research mainly focuses on teams that work within the same organisation, such as schools, hospitals and hospices (Oliver and Peck, 2006; Parker-Oliver et al., 2005). The interdisciplinary nature of these studied teams is limited, though, because their disciplines may differ, but are often in the same line of work, such as nurses and doctors, or US police and probation officers (Corbett, 1998). Even teachers and social workers may have shared goals in their dealings with students, although their intervention techniques tend to differ. The networks we study have different per-

formance measures, goals and cultures by the very nature of the involved disciplines and organisations. This makes it even more difficult to organise cooperation effectively, but not less necessary to do so.

4.2 Literature review

4.2.1 Interdisciplinary cooperation

According to Andrews (1990), interdisciplinary cooperation occurs when "different professionals, possessing unique knowledge, skills, organisational perspectives, and personal attributes, engage in coordinated problem solving for a common purpose" (p. 175). Bruner (1991) emphasises the idea that interdisciplinary cooperation allows for achievement of goals that individual professionals could not reach by themselves. This definition is also used by Bronstein (2003), whose work will be leading in our literature review. Hence, we will also start from this definition. Yet, more has been written about this topic. D'Amour et al. (2005) offer a detailed conceptual discussion. Here, such a broad discussion is not needed, given this chapter's exploratory purposes. According to Bronstein (2003), interdisciplinary cooperation is a broad term, being associated with five success factors:

1. Interdependence, which is the mutual reliance that professionals must accept to accomplish the joint set of goals;
2. Newly created professional activities, which refers to activities produced by the team that could not have been designed by any of the individual professionals alone;
3. Flexibility, which involves the team's ability to settle on productive compromises in the face of disagreement;
4. Collective ownership of goals, which relates to the shared responsibility that professionals have regarding the entire process of goal achievement; and

5. Reflection on processes, implying the awareness that professionals have as to working together and the optimisation of processes.

Structural characteristics determine to a substantial extent whether or not these five critical success factors materialise (Bronstein, 2003), next to the personal and professional characteristics and cooperation history that we studied in Chapter 3. For instance, professionals must have the time and the opportunity for reflection, and for deeply engaging in collaborative activities. These structural characteristics are probably of greater importance for interdisciplinary teams than for regular teams. While non-interdisciplinary teams operate under the same management, facing the same structural characteristics, professionals from different disciplines are more likely to fall under different managers, or even under different organisations, making it less likely that they will all have ample opportunities to meet and build relationships. Here, a NOA forcing this upon (or at least facilitating this for) participating organisations may have an important role to play. So, the structural characteristics determine whether and, if so, to what extent the involved organisations allow their representatives to participate in the network, which defines the boundaries of how a NOA can support the involved professionals. For example, a study by Stead et al. (2004) reports that professionals recognise that collaborative meetings can be central to their work, being considered as valuable and necessary for sharing opinions, broadening understandings and making decisions. As meetings are crucial in the context of the problem-solving nature of an interdisciplinary public network, it is essential that such meetings are organised frequently enough so that professionals can stay up to date in order to handle the issues that they are dealing with effectively. Bringing professionals together frequently enough for meetings allows them to build relations amongst each other, in this way developing trust and a collaborative history, which are important facilitators for interdisciplinary cooperation (Bronstein, 2003).

Hypothesis 1. *The frequency of meetings is positively associated with perceived PII cooperation.*

Moreover, as collaborative meetings are needed for effectively sharing opinions, broadening understandings and making decisions, these meetings should be extensive enough to be able to achieve this set of key goals (Stead et al., 2004). In PII teamwork, different perspectives have to be combined, reflecting different disciplinary viewpoints and terminologies, and different - potentially conflicting - organisational goals, agendas and cultures. To achieve this in PII teams is anything but easy, and requires time-consuming discussions. Hence, sufficient time should be spend on expressing the different views, to create a shared understanding of the issues at hand, and to be able to settle on effective compromises that are considered legitimate by all involved.

Hypothesis 2. *The length of meetings is positively associated with perceived PII cooperation.*

However, because PII cooperation can only be effective when all the team's professionals participate well, sharing knowledge and/or information and expressing opinions, interdisciplinary leadership skills facilitate interdisciplinary collaboration (Banfield and Lackie, 2009; Mirabito, 2012). In a cooperative effort, based on meetings, it is a chair, who is a neutral person amongst the interdisciplinary professionals, who executes these leadership skills, as there is (and should be) a lack of natural hierarchy amongst the professionals in the PII team. It is important that a chairperson takes the lead during the meetings to make sure that all professionals can exchange information and opinions fairly and productively. Having a chair is commonly perceived as a characteristic that distinguishes a meeting from any other communicative event, as well as a structural device for smoothly running the event (Orlikowski and Yates, 1994). Chairs serve a variety of purposes, such as opening and closing the meeting, introducing and shifting between agenda points, allocating turns, and sanctioning inappropriate conduct (Angouri and Marra, 2010). Allocating turns and sanctioning inappropriate

conduct are especially important in a network context that brings together interdisciplinary partners. A chair must make sure that everyone can properly exchange information and express opinions about the issue they are working on. When a chair facilitates the meeting to run smoothly, and extracts all necessary information and opinions from partners, group decision-making will improve (Tropman, 1996).

Hypothesis 3. *A chairperson who makes sure that all team members can exchange information and express their opinion is positively associated with perceived PII cooperation.*

Not only the *average* feeling across all the PII team's professionals as to the chairperson's skill to have everyone exchanging information expressing their opinion is important, but *agreement* on this issue is essential as well. That is, the *spread* of the team members' evaluation of the chairperson's skill is argued to have an effect next and on top of the *mean* chairperson's skill assessment, as predicted in Hypothesis 2. We admit that this is not a structural characteristic, as it arises out of the participants rather than the actions of the NAO. Yet, we find it important to include for the following reasoning. A key task of the chair is to speak for the group, and the collective decisions made, as a whole, and members expect the chair to execute this task fairly (Tropman, 1996). When some of the PII team members perceive that the chair does let everyone speak their mind whilst others do not, this means that the task is evaluated as being executed fairly by some, but not by others. This is likely to negatively influence the cohesion in the group, as well as their willingness to cooperate well with one another. Professionals may, of course, also agree that the chair does not operate effectively, but this is less problematic because then the team is not split into opposing groups on this critical issue, leaving the group's cohesion and cooperation willingness unaffected, still implying a passable team (Tropman, 1996): If all team members agree that the chair is executing her or his key task unfairly, the professional group as a collective can try to bypass or compensate for the chair's malfunctioning.

Hypothesis 4. *Disagreement between professionals as to the chairperson's skill to make sure that all team members can exchange information and express their opinion is negatively associated with perceived PII cooperation.*

Additionally, we argue that intra-team disagreement will have a negative moderating effect on the relation between the chairperson's mean skill and perceived PII cooperation. In general terms, this logic implies that the effect of the mean is conditional on the spread, as argued by Boone et al. (2004). When mean skill is perceived to be fairly good, cooperation may not be positively affected when disagreement in the group is large because some team members do then perceive the decision-making process to be unfair. When those professionals do not put full effort into the team, others may, in turn, be disappointed by this shirking behaviour. The positive effect of (sub-)optimal decision-making on cooperation is countered by the disagreement that leads to mutual disappointment and inappropriate conduct amongst the professional team members, substantially reducing the likelihood of successful cooperation (Angouri and Marra, 2010; Tropman, 1996).

Hypothesis 5. *Disagreement between professionals as to the chairperson's skill to make sure that all team members can exchange information and express their opinion negatively moderates the relation between the chairperson's mean skill and perceived PII cooperation.*

Apart from organising and hosting the official PII team meetings, the NOA may provide shared offices to all PII team members, on top of their workspace in their home organisations. This increases the opportunities for communication among the PII team's professionals (Sloper, 2004). Such communication outside formal meetings is needed for the PII team's professionals to connect further, and to discuss issues that are not immediately relevant for all team members. Examples relate to the joint execution of a task by a sub-group within the PII team or more extensive bilateral information exchange between pairs of professionals. Furthermore,

such interaction will create trust and short ties, improving cooperation further. Network locations should not only offer professionals meeting workspace, but should provide attractive opportunities to stay at the network location to deepen the ties with the other PII team members outside the official meeting hours. This is very difficult to achieve when all PII team members have to return to their home organisation after the official meetings because the NOA does not offer anything beyond formal meeting facilities.

Hypothesis 6. *The hours professionals spend at the network location is positively associated with perceived PII cooperation.*

Figure 4.1 visualises the full model, referring explicitly to all hypotheses and the expected signs of the relationships. Despite the arrows in the diagram, we want to emphasise the correlational nature of this study.

4.2.2 Policy background

For this study, we need a sample of police-involved PII teams - hence, of teams in networks that have interdisciplinary and multi-agency aspects. After all, our key argument is that such teams will particularly benefit from structural support provided by a NAO. Interdisciplinary and inter-organisational team members are less likely to understand and trust one another, because of their different professional and organisational backgrounds: Therefore, such PII teams can benefit from the support delivered through a NAO. Hence, we were looking for a NAO-governed network (a) with interdisciplinary participants (b) from different organisations that (c) include the police. The Netherlands offers an ideal study setting in the form of an official network of inter-organisational cooperation between judicial, care and social work organisations, called *Veiligheidshuizen* (or Safety Houses, in English). Safety Houses are an initiative launched in the 1990s to create a cooperative response to local problems in the realm of neighbourhood safety (Graham

ners from judiciary, social work and (mental) health care organisations. Because teams in Safety Houses will only deal with complex multi-problem cases, partners from different disciplines and different home organisations, including the police, are always involved.

A high-level steering group of senior professionals from the partner organisations is responsible for strategic decision-making as to a Safety House. Daily management and running operational processes is arranged by a NAO. The NAO consists of professionals who have their home base in one of the partner organisations, but who are paid for from the budget of the Safety House. Despite their background as professionals formally employed by a partner organisation, they operate independently in the interest of the Safety House, and they will not interfere with the decision-making in the PII teams. The NAO offers the partner organisations' professionals a physical location to meet, and the NAO is responsible for organising PII team meetings. In these PII team meetings, the teams discuss individual clients or other 'cases' such as families or problematic youth groups. This is why these team meetings are commonly referred to as case meetings.

In the pre-design stage of this study, we visited a number of Safety Houses several times and held informal talks with NOA staff, professionals from the PII teams, and managers from participating organisations. The conclusion from this exploratory stage is that, apart from organising meetings at a physical location, NAOs do not act very homogeneously. For one, the frequency and duration of meetings are very diverse. Furthermore, some NAOs offer all PII team professionals a workspace so that they can stay at the Safety House outside official meetings to work on the spot, whereas others will only offer workspaces to a limited number of PII team professionals, or not at all. This means that PII team professionals spend much time in some Safety Houses, while PII team members only visit other Safety Houses for the official meetings to immediately return to their own organisation afterwards. Finally, although we observe a trend toward professionalisation of NAO staff, the heterogeneity across Safety Houses is quite substantial.

These trends and differences imply that our setting represents relevant variation, which offers ample opportunities to examine whether an NAO's contributions are significantly related to the effectiveness of interdisciplinary cooperation between professionals from different agencies. Research findings may have policy implications, as NAOs are funded through public money, either directly from the government (as is the case here) or indirectly through public organisations. If investments in structural characteristics, such as workspace facilities or NAO personnel, are not associated to improved cooperation of professionals in PII teams, then the NAO may indeed just as well stick to its administrative tasks alone, and let the involved professionals organise successful cooperation themselves; but if we do find a significant relations between specific structural characteristics and collaborations, then NAOs might be able to do more to make public services, and especially policing, more effective by offering something extra to the PII teams and their professional members.

4.3 Methods

4.3.1 Research design

Like in the previous chapters, we would like to demonstrate how the methods of our study deviate from the ideal. By means of a research design one can show how one intends to identify the causal effect of an independent variable on a dependent variable. We would ideally like to show that there is a causal relationship between our independent variables and the variables of interest: perceived collaboration and satisfaction with performance. Ideally, we would conduct an randomised experiment (with a sufficiently large number of participants), where an experimental variation is created for the independent variables. This would allow us to attribute changes in the dependent variable to a change in the independent variable. Now, unfortunately, we could not achieve experimental conditions in this study. We study teams as they are, rather

than subjecting them randomly to conditions. Although it would have been interesting to do an experiment, it would have been very difficult to achieve random distribution over a control and a treatment groups. We could have theoretically introduced conditions to randomised groups, such as the meeting frequency, duration and the time spend at the network location. We could have taken two random groups and could have introduced a skilled chair to one group, and an unskilled chair to the other group to test how the skill of a chair contributes to cooperation. However, how skilled the chair is perceived to be is not likely to be exogenous. The perceived skill of the chair is probably related to a number of other things that might also influence collaboration, such as the manner in which he or she manages interpersonal relationships, or how friendly this person is perceived to be.

However, because we have to deviate from the golden standard of an experiment, it means that we struggle with a number of issues that make it very difficult for us to make causal claims about our results. We observe PII teams in their natural setting, and that natural setting is highly unlikely to be random. Despite the control variables we use, there may be characteristics of the team that we do not observe, but which could be important. Because we do not take these unobserved characteristics into account, we may be over- or underestimating the effect of the independent variables on the outcome variables. We have added controls that we find theoretically to possibly have an effect on the outcome variable, in an attempt to deal with the omitted variable bias. However, we cannot be sure these controls are responsible for all unobserved variation; most likely, they are not. As we make use of a cross-sectional design, we cannot benefit from the estimation techniques that can be used with panel data, mostly in terms of coping with omitted fixed effects.

Hence, as we find the research design to be far from perfect, we will not make any causal inferences about our findings, and (still carefully) treat the findings of this correlational study as mere associations between the variables of interest. This does not mean,

however, that work of this nature has no merit on its own. Explorative studies like these pave the way for further research, as associations can suggest which variables may be of the greatest interest or relevance. We will discuss the implications of the weaknesses in our research design in the discussion of this chapter.

4.3.2 Data

Online surveys were used in this study to collect data. As there are not that many Safety Houses in the Netherlands (about 40), we decided to invite all of them to participate in the survey. All NAO managers received an email with the request to circulate the link to the survey amongst the professionals working in the Safety House's PII teams. In total, 204 respondents started the survey, but not all finished, generating useable responses from 185 members of 47 different case meetings in 21 Safety houses. This response is not disappointing, given that we received data from half of the Safety Houses. A rough approximation, as the total number of PII professionals in all Dutch Safety Houses is unknown, suggests that our sample represents about 10 per cent of the target population. From the 47 case meetings, we eventually could make use of the data of 38 case meetings for which we had multiple respondents. We are aware of the limited size of the sample, but our 5:1 ratio of observations to variables is sufficient for our explorative purposes (Hair et al., 1998) in this new and emerging field of research on network organisations.

4.3.3 Measures

We developed an online survey with fifty questions, based on Bronstein's (2003) model, other literature, and insights derived from our pilot interviews with individuals working in Safety Houses. This is the same survey that we have used for the study in Chapter 3. Therefore, we refer, again, to Appendix B for the full translated survey. The full original Dutch survey is available upon request. Because the responses to our survey are at the level of individual

members of PII teams, while we wish to study team-level issues, we have averaged the variables to the team level, unless specified differently.

Our dependent variable *Interdisciplinary cooperation* is measured with an adjusted version of the Index of Interprofessional Cooperation (Mellin et al., 2010), with non-substantive changes implemented that suit the context of our target group. The internal consistency of this adjusted index is good with a Cronbach's alpha of 0.89. The underlying sub-scales reveal moderate to good consistency with Cronbach's alpha reliability scores of 0.87 for professional flexibility, 0.70 for role interdependence, 0.79 for newly created professional activities, and 0.84 for reflection on processes.¹ These scores are somewhat lower than the outcomes of the original study, but acceptable for interdisciplinary cooperation indices (Wittenberg-Lyles et al., 2008). The plausible assumption is that higher scores on this scale and these sub-scales are associated with higher PII team cooperation effectiveness (as is clear from the substance reflected in the formulation of the individual items, as listed in Appendix B).

The first independent variable (H1), *Meeting frequency*, is measured by asking respondents to report how frequently their case meetings take place. We provided four answer categories: (1) weekly, (2) biweekly, (3) monthly, and (4) 'other'. From these answers, we calculated how many meetings the team has on a yearly basis, as a team-level average. To measure our second independent variable (H2), *Meeting duration*², we asked respondents to assess how

¹By way of robustness check, we estimated our model for the different factors of interdisciplinary cooperation (available upon request), but found the model to perform best when taking the average of all factors - and hence by focusing on interdisciplinary cooperation as a composite construct.

²The preliminary interviews with managers and professionals have indicated that meeting lengths (and frequencies) are commonly fixed in advanced by the NAO and the partner organisations. After all, they cannot have professionals running off to Safety House meetings all the time, they have other tasks. Yet, we cannot fully guarantee that this is strictly the case for all Safety Houses, and we also believe that, even when meeting arrangements are fixed, case meetings may sometimes take a bit longer or shorter.

long their meetings usually last. We, again, gave four answer categories: (1) half an hour or less, (2) an hour, (3) 1.5 hours, and (4) two hours or more. Categories were then recoded into the average number of hours at the team level.

Regarding the third independent variable (H3), respondents were asked to score the chairperson on a number of skills³. A key example item is "The chairperson makes sure that the opinions of all professionals are heard." Answers were given on a Likert-type scale ranging from 1 to 5, where 1 is 'poor' and 5 is 'excellent'. The team-level mean score is our measure of *Chair's skill*. For the fourth independent variable (H4), *Disagreement on chair's skill*, we took the standard deviation of the *Chair's skill* variable for each team to create our measure of disagreement. Our fifth independent variable (H5) is the product term of *Chair's skill* and *Disagreement on chair's skill*.

Our sixth independent variable (H6) is *Hours at network location*.⁴ To create a proxy for this variable, respondents were asked to assess how many hours per week they spend at the network location. Again, we calculated the average number of hours spend at the network location across all assessments of all members of the same PII team to construct a team-level variable.

We added two *control variables* that are known to be important from earlier work on team cooperation.⁵ Tsui and O'Reilly (1989)

³We initially included other skills of the chair as well, but we did not find these to be significant in the model (available upon request). These other skills are: (1) keeping time on agenda items, (2) starting and stopping the meeting on time, and (3) summarising and formulating agreements.

⁴These hours are usually fixed in the collaboration agreement to some extent. Professionals have other tasks at the home organisation, so they can often be at the Safety House for a limited amount of hours. Some professionals need to be at the location for a number of hours a week, sometimes even full time. Other professionals have more liberty to stay at the location, but this still needs to be facilitated by the NAO, because professionals need to have workspaces available. It is thus, one way or the other, much in the hands of the NAO to stimulate/facilitate the presence of a professional at the network location.

⁵Age heterogeneity may be another likely control variable in team studies. We removed age heterogeneity from all models reported here, however, as this vari-

report that employees sharing similar demographic characteristics are less prone to conflict and can more effectively work together. The first control variable is gender composition, taken as the proportion of males in the PII team. The second control variable relates to educational team-level heterogeneity, measured through the standard deviation of the education measure at the level of the PII team. Education was captured through four answer categories, asking for the highest level of education: (1) secondary education, (2) vocational training, (3) higher vocational training, and (4) university degree.

4.3.4 Analysis

In principle, our data can be analysed with OLS regression, as we have a cross-section with an independent variable that can be treated as (quasi-) continuous. We estimate the standard errors using the Huber-White sandwich estimators. Such robust standard errors are appropriate when the data are associated with minor concerns about failure to meet the standard OLS assumptions, such as non-normality, heteroscedasticity, and few observations exhibiting large residuals, leverage or influence. We have made use of Stata 12 to run the statistical analyses. We will estimate the following equation:

$$\begin{aligned} Interdisciplinarycooperation(t) = & \alpha + \beta_1 Meetingfrequency(t) \\ & + \beta_2 Meetingduration(t) + \beta_3 Hoursatnetworklocation(t) \\ & + \beta_4 Meanchairsskill(t) + \beta_5 Disagreementchairsskill(t) \\ & + \beta_6 Meanchairsskill * Disagreementchairsskill(t) + Controls(t) + e \end{aligned}$$

(With t being team)

Because all our data are self-reported by single respondents and are collected through the same questionnaire during the same period of time with a cross-sectional research design, we have to check our data for common-method bias (Podsakoff et al., 2003).

able turned out to be non-significant in all models without effecting the pattern or results (available upon request).

This is variance that can be attributed to the measurement method, rather than to the constructs of interest. *Ex ante*, we took precautionary measures to prevent common-method variance, such as guaranteed anonymity for respondents (Chang et al., 2010a). *Ex post*, we conducted Harman's one-factor test on all questionnaire items to test for the possible presence of a common-method effect. The result from the factor analysis is that the majority of the survey questions load onto five factors with respective proportions of variance of 13.89, 11.39, 10.11, 8.83, and 7.20 per cent. Hence, not only is the number of factors large *vis-à-vis* the number of variables, but also is none of the factors responsible for the majority of the variance. From this, we can conclude that the data are unlikely to suffer from a common-method bias.

4.4 Results

Table 4.1 provides the descriptive statistics. Approximately 74 per cent of our sample is female. Because we do not know the characteristics of our population, it is difficult to say whether or not this is representative. However, many organisations in (mental) health-care and social work, with relatively many female employees, are involved in Safety Houses. This does explain the large proportion of women in our sample. Most respondents have had higher vocational training, which is to be expected as the involved professionals commonly carry out complex, but practical tasks. Within the PII teams, the age difference is not that large (7.56 years). Most respondents are around 45 years old, suggesting that we have a representative sample of experienced professionals in the PII teams.

The case meetings, on average, take place about 50 times per year, so almost weekly, and the average meeting duration is nearly 1.5 hours. Overall, the respondents are quite satisfied with the skill of the chair, with an average score of 3.85 out of 5, with the lowest team average still being close to a pass. We do observe, however, that intra-team disagreement about the skill of the chair is

substantial, albeit not huge (0.61): Most respondents from the same PII team give the chair the same score, or one grade above or below. The mean presence of a professional at the network location is 8.25 hours per week.

Table 4.2 shows the bivariate correlations between variables in our data, including their significance levels. We find a significantly negative relation between frequency and duration of meetings. The more often meetings are organised the shorter they tend to be. Also, we observe a significant relation between the mean skill of the chair and the standard deviation of this skill variable: When intra-team disagreement is high, the assessed mean skill tends to be lower. Overall, we note that none of the bivariate correlations between any pair of independent variables is above 0.5, way below the rule-of-thumb threshold of 0.7. To check for multivariate multicollinearity, we calculated the variance inflation factor (VIF): all VIF scores are well below the common threshold for concern of 10 for all variables (1.38, on average).

We also studied the intragroup correlations to see to what ex-

Table 4.1: Descriptives

	Mean	SD	Min	Max
Interdisciplinary cooperation	3.59	0.24	3.1	4
Gender (proportion)	0.74	0.25	0	1
Education (SD)	0.37	0.32	0	1
Age (SD)	7.56	3.72	0	15
Meeting frequency	49.56	62.62	10.6	255
Meeting duration	1.48	0.34	0.6	2
Mean chair’s skill	3.85	0.36	3	5
Disagreement chair’s skill (SD)	0.61	0.49	0	1
Hours at network location	8.25	7.74	1	37
N	38			

SD = standard deviation;
Minimum is rounded to one decimal;
Maximum is rounded to an integer.

tent team members agree on the different variables. On the measures that team members should agree, such as meeting frequency and duration the intragroup agreement was 0.71 and 0.44 respectively. There is no perfect agreement, which may be an indication of some variability in the meeting frequency and duration of random error. The agreement was much smaller on the amount of time spend at the network location (0.15) and the skill of the chair (0.00), as is to be expected as not every professional spends an equal amount of time at the network location, and skill of the chair is a more subjective measure.

Table 4.3 lists the results for our regressions for eight models in total, starting with a Model 1 with only the control variables. Subsequently, in Models 2 to 6, we have separately added the independent variables of interest. Model 7 contains all variables, except for the interaction effect. Model 8 is the full model, including the moderation product term. Models 7 and 8 are the best in terms of adjusted R^2 : The models explain about 49 per cent of the variance in the dependent variable, which is very satisfactory indeed for team-level research. Model 4, which includes the control variables and *Hours at the network location*, has a relatively good adjusted R^2 (0.28), too, which gives an indication that this is a relatively important variable in explaining *Interdisciplinary cooperation*. As Model 8 does not produce a better fit than Model 7 in terms of explaining variance, we have added Akaike and Bayesian Information Criteria to indicate the best model fit. Model 7 has the lowest (most negative) information criteria, indicating that the more parsimonious Model 7 is preferable to Model 8.

Models 7 and 8 provide support for Hypotheses 1, 2 and 6. First, the frequency of case meetings has a marginally significant positive relation with interdisciplinary cooperation, but with a beta-coefficient close to zero (0.0001). Although we cannot reject H1, its practical importance probably is very limited due to the small coefficient. Second, the duration of meetings is positively and significantly related to interdisciplinary cooperation: Longer meetings

Table 4.2: Bivariate correlations

	1	2	3	4	5	6	7	8	9
1. Interdisciplinary cooperation	1								
2. Gender (proportion)	-0.198	1							
3. Education (SD)	0.224	0.053	1						
4. Age (SD)	-0.090	-0.103	-0.076	1					
5. Meeting frequency	0.101	0.166	-0.081	0.26	1				
6. Meeting duration	0.087	0.011	0.174	-0.084	-0.522***	1			
7. Mean chair's skill	0.316	-0.174	0.067	-0.028	-0.091	-0.080	1		
8. Disagreement chair's skill (SD)	-0.115	0.063	-0.016	0.057	0.118	0.087	-0.454**	1	
9. Hours at network location	0.436**	0.130	-0.145	-0.253	0.077	-0.148	-0.169	-0.114	1

** p < 0.001, *** p < 0.01 and * p < 0.05.

are related to better interdisciplinary cooperation in the team. H2 is supported. Third, the hours that professionals spend at the network location is positively and significantly related to cooperation, too. Looking at the full Model 8, the coefficient is again quite small, though. H6 is supported, but is perhaps not of that much practical importance.

The results for the chairperson's skill variables are mixed. On the one hand, Models 5 and 7 show that the mean perception of the chair's skill is positively related to interdisciplinary cooperation; When professional PII team members feel that, on average, their chair is skilful, they are also more positive about interdisciplinary cooperation in their team. Increasing this skill of the chair with one standard deviation from the mean will improve interdisciplinary cooperation with 3.2 per cent, suggesting some practical relevance. On the other hand, this result disappears when we add the interaction with intra-team disagreement about the chair's skill. Disagreement per se is negatively related to interdisciplinary cooperation (as predicted), but never significant, whilst the interaction effect is insignificant, too, but positive. We might now decide to rest our case, and conclude that our Hypotheses 4 and 5 are unsupported. However, as the mean chair's skill variable is significant in Models 2 and 4, a closer look at the marginal effects of mean chairperson's skill on interdisciplinary cooperation, conditional on different values of intra-team disagreement, may reveal deeper insights. We have done so by means of a conditional marginal plot, as reproduced in Figure 4.2.

The marginal effect plot suggests that the overall moderating effect of disagreement about the chair's skill on the relation between mean chairperson's skill and interdisciplinary cooperation is positive, but insignificant. However, the conditional marginal effect plot offers subtle insights, as this plot demonstrates how much effect intra-team disagreement has on the coefficient of the relationship between mean skill and interdisciplinary cooperation for different values of disagreement. The shaded area around the line

Table 4.3: Regression results

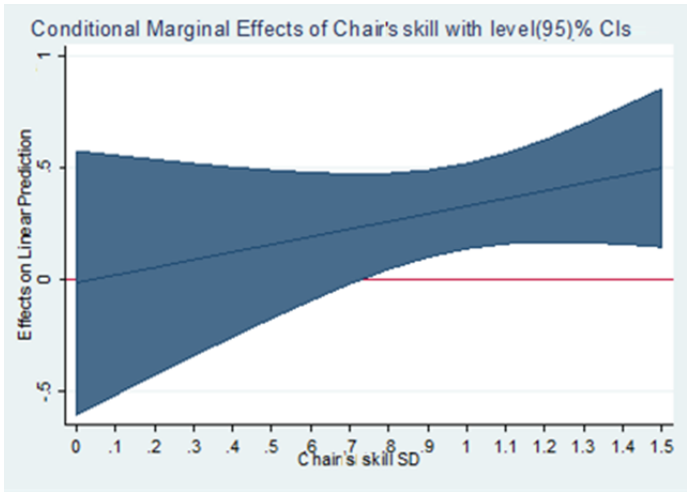
VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Meeting frequency	0.00 (-0.001)					0.00* (0.000)	0.00* (0.000)	
Meeting duration		-0.050 (-0.180)				0.240** (-0.085)	0.240** (-0.092)	
Mean chair's skill			0.310* (-0.129)			0.320** (-0.096)	0.320** (-0.270)	0.010
Disagreement chair's skill				-0.050 (-0.087)		0.060 (-0.071)	-1.170 (-1.075)	
Mean chair's skill*								0.320
Disagreement chair's skill								(-0.278)
Hours at network location						0.00 (-0.008)	0.020*** (-0.004)	0.020*** (-0.004)
Education (SD)	0.080 (-0.155)	0.080 (-0.156)	0.090 (-0.177)	0.090 (-0.152)	-0.020 (-0.119)	0.180 (-0.142)	0.200* (-0.098)	0.160 (-0.105)
Gender (proportion)	0.440 (-0.270)	0.440 (-0.276)	0.440 (-0.264)	0.430 (-0.305)	0.050 (-0.12)	-0.200 (-0.144)	-0.270* (-0.101)	-0.270* (-0.098)
Observations	56	56	56	56	55	38	38	38
R-squared	0.12	0.12	0.12	0.12	0.2	0.10	0.58	0.6
Adjusted R-squared	0.08	0.07	0.07	0.07	0.15	0.03	0.49	0.49
AIC	58.65	60.64	60.54	60.59	23.48	3.57	-17.43	-17.18
BIC	64.72	68.74	68.64	68.69	31.51	10.12	-4.33	-2.44

Standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05, ~ p<0.1
DV: Interdisciplinary cooperation
(intercept estimated, but not recorded in table)

shows the confidence intervals (CI) for the coefficient. Whenever the confidence intervals fall fully below or above zero, the coefficient is significant. The plot shows that there is, indeed, a tiny positive moderating effect that is significant for intermediate to high levels of disagreement. When the standard deviation of disagreement on the chair’s skill is approximately above 0.75, then disagreement has a positive significant effect on the relation between the mean skill of the chairperson and interdisciplinary cooperation. Thus, our hypotheses as to the moderation effect of disagreement on the relation between the mean skill of the chairperson and interdisciplinary cooperation are partially supported after all.

Jointly, all results regarding the chair’s skill hypotheses suggest the following. First, the mean skill of the chairperson has a positively significant relation with interdisciplinary cooperation - thus, we find support for H3. Second, disagreement about the chair’s skill does not seem to have a negative effect per se, as none of the coefficients of this variable reach significance. Therefore, we have

Figure 4.2: Marginal plot of mean chair skill and intra-team disagreement



to reject H4. Third, there is no overall interaction effect between the mean chairperson's skill and disagreement on this issue on interdisciplinary cooperation. Fourth, we do, however, observe that the positive effect of the chairperson's skill on interdisciplinary cooperation increases somewhat for intermediate to high levels of disagreement. However, the sign of this partial moderation effect goes against our prediction: Hence, we must reject H5. We return to this surprising finding below.

4.5 Discussion

This chapter's aim is to gain deeper insights into the structural characteristics that NAOs can offer to their interdisciplinary network professionals in order to enhance their collaborative effectiveness. With this study, we hope to have come closer to bridging a gap in the literature that focuses only little on practical work in network arrangements with partners from very diverse disciplines and ditto home organisations, in the public domain of police and safety-related services: While quite some attention has been given to a variety of governance aspects, not much is known about the operational ins and outs of such network practices. Knowing what does and what does not work in enhancing PII teamwork is important, as this can guide intervention in ways that enhance the effectiveness of this emerging type of challenging cooperation in the public sector. Our exploratory study into Dutch Safety Houses has generated a series of insightful results, of which some are as expected and others are not - in terms of both statistical significance and practical importance.

Meeting frequency is positively and significantly related to cooperation in our interdisciplinary and inter-organisational teams. By way of robustness check, we tested whether there was a non-linear relationship, but none was found (available upon request), indicating that more meetings are (slightly) better, even when they are organised on a daily basis. However, the coefficient is so small for this variable that there is little practical value in adding more

meetings to the PII team's schedule, the more so given that such extra meetings are costly by absorbing time of professionals who could otherwise be more productive in their home organisation. Hence, from a cost-benefit perspective, increasing the number of PII team meeting does not seem to be an effective and efficient intervention practice.

Meeting duration is also positively and significantly related to interdisciplinary cooperation. Obviously, meetings that take too long may have a negative effect on (interdisciplinary) cooperation, because professionals may find themselves and others tired from lengthy discussions, as a result perhaps even coming to less productive compromises. We did control for this initially by adding the squared meeting duration variable in our regressions, but we could not find a non-linear relation between meeting duration and interdisciplinary cooperation (available upon request). It could be that the number of observations in our small dataset is insufficient to confirm any non-linearity, or that the cut-off point is located far above two hours. Taking, for now, the linear relationship for granted, our finding reveals substantial practical relevance of the meeting duration variable. We do not control for the content of the meeting. Obviously, by extending the meeting with an hour while nothing productive is being done will probably not contribute to perceived collaboration or performance. We may hypothesise that as meetings get longer, professionals lose their focus and are perhaps not as sharp in exchanging information or thinking regarding good intervention plans. If so, we might be underestimating the effect of the meeting duration on collaboration. Together with the meeting frequency finding, this suggests that it may be interesting to devote more research to these topics, which would be better tested by means of a randomised experiment.

As far as the chairperson's skill variable is concerned, the evidence is mixed. On the one hand, we find that a skilful chair, in the sense of making sure all professionals in a PII team are heard, is positively and significantly associated with interdisciplinary cooperation. On the other hand, however, intra-team disagreement

about this skill does not turn out to be as crucial as we had expected. When disagreement is high, the moderating effect on the relation between the mean skill of the chairperson and interdisciplinary cooperation is positive, but the overall effect is not significant. Surprisingly, though, for intermediate to high levels of disagreement, this lack of consensus actually slightly enhances the relation between mean chairperson's skill and interdisciplinary cooperation. The following suggestion for what could be going on is merely speculative, but possibly, ignorance is bliss in this situation. Disagreement about the chair's skill may not lead to actual conflict in the team, as those who do not feel that the chair invites them to contribute, may believe they have nothing relevant to add anyway. Overall, our findings suggest that stimulating the chair to give each and every PII team member a say in the discussion is of practical relevance, enhancing the PII team's interdisciplinary cooperation with or without intra-team agreement on how the chair performs this critical task.

We did find a positive significant association between hours spend at the network location and interdisciplinary cooperation, but as with meeting frequency with such a small coefficient that even if there is a causal effect, we can doubt whether in practice asking from professionals to stay at the network location longer will add much to the effectiveness of PII team cooperation. Again, we checked for a non-linear relationship, but none was found (available upon request). From a cost-benefit perspective, expanding the number of hours spend at the network location does not seem to be an intervention strategy that deserves priority.

4.5.1 Limitations and future research

Inevitably, there are some limitations to this study, particularly given its exploratory nature, being the first of its kind, to the best of our knowledge. The way we have conducted this study is far removed from the ideal research design of a randomised experiment. We did not randomly subject teams to different conditions, but rather took a sample of existing teams and their existing con-

ditions. Yet, this sample could have been better as well. Although the setting of Dutch Safety Houses is appropriate, we were only able to collect data regarding a small number of meetings and PII teams, and from those meetings and teams not all participants responded. Evidently, it would have been preferable to have a larger and more complete sample. It was, however, difficult to gain sufficient research access to all Safety Houses (only about 40, across the country), because they are independent network organisations that have to be approached and convinced one by one. Note that this access and small sample issue is anything but unique to our setting, as this tends to be a real challenge in the context of any group-level research with the ambition to have multiple respondents per team (see e.g. Bogaert et al., 2012).

Furthermore, due to the lack of a randomised experiment, there is little we can say about causality in this study. Thus we have to be careful to interpret the associations that we have estimated between the variables. We can only be certain that the independent variables cause variations in the dependent variable if there is no other explanation for what we find. However, because we probably do not measure all variables that may be relevant, we cannot be sure that this is indeed the case. From our preliminary interviews with PII team members and NAO members, we found that the variables which we tested were to the largest extent determined by the participating organisations and the NAO. They decided how often meetings should approximately occur, how long meetings should last and how much time PII team members can spend at the network location. This makes sense, because the PII team members often have to execute tasks at the home organisation as well. Organisations that participate in the Safety House do not want their employees running off to the network location at random moments; they should be available to the home organisation to a greater or lesser extent. Yet, we cannot exclude the possibility that sometimes, or at some Safety Houses, the PII team has something to say about meeting frequency or duration. In that sense, if collaboration is going well, and they feel it is productive, the PII team may ask for

more, or longer meetings, which could suggest that there might be some reversed causality going on. As we do not have a panel dataset, we cannot test this, though. In relation to the time spend at the network location, PII team members may have a stronger upper limit than a lower limit. That a professional is allowed to spend 10 hours at the network location, does not mean that (s)he will actually have to do that, or in fact does that. How much time is spend at the network location may be related to how much the professional likes spending time with other team members (to the extent they are structurally present), and/or to the work pressure of the professional that forces him or her to be at the home organisation or with clients. As such, we may overestimate the estimated association between spending time at the network location and collaboration.

Secondly, not all variables were measured in an optimal way. Particularly, we had to rely on subjective measures of the chair's skill and interdisciplinary cooperation. In principle, objective measures of such variables are to be preferred. However, again, collecting objective information about this type of variables is never easy in team research - let alone in the context of public organisations that are associated with additional measurement complexities due to the very nature of their activities, as we will discuss further in Chapter 5. Luckily, as far as our outcome measure is concerned, earlier work illustrates that the Interprofessional Cooperation Index is a good alternative (Mellin et al., 2010). Still, future work could introduce other outcome measures, such as those based on client-specific performance information. Moreover, regarding the critical chair's skill input variable, the actual perception of the chair's skill by team members is what really counts for team functioning, implying that using a subjective measure is appropriate anyway. Nevertheless, now that this study has shown that intra-team disagreement regarding this skill is not so relevant for interdisciplinary cooperation, future research may check the robustness of the effect of the perceived mean skill of the chairperson by introducing a wider set of, subjective and objective, measures. In Dutch Safety Houses,

for instance, future work might explore whether or not a chair has received special training, how (s)he performed during this training, and how both skill-related variables affect intra-team chairperson skill assessments (mean and spread) and interdisciplinary coordination.

This study is but a first step in studying the structural characteristics that NAOs can offer to enhance team cooperation in interdisciplinary networks with professionals from different home organisations. We have produced preliminary evidence that some structural variables contribute significantly and practically to team cooperation, above and beyond the oft-studied governance aspects, but there is still a black box in terms of the functioning of such PII teams. For instance, we have reason to believe that staying at the network location longer improves interdisciplinary cooperation, but we do not know how staying longer affects specific aspects of team functioning such as trust building or agreement fine-tuning. Moreover, as this is the first study of its kind, we decided to engage in cherry-picking, focusing on a limited set of structural characteristics, leaving other potentially important variables unexplored, an example being the chairperson's and team members' personalities (see e.g. Boone et al., 2004), or intra-PII faultlines (see e.g. Rico et al., 2007). Future works can deepen our understanding of PII teamwork by further opening the black box of team functioning.

4.5.2 Policy implications

Given the correlational nature of our study, it is difficult to make policy implications, because we cannot be sure about causality. Our evidence suggests that practically, the relation between lengthier meetings and cooperation is more relevant than that between meeting frequency and cooperation. There might be something to gain by lengthening meetings, but future research would have to point out if there is truly a causal relation between the two variables. Meetings should, of course, not be extended endlessly anyway, but our results suggest a positive relation up to at least 2 hours. We did

not find a very strong relation between cooperation and time spent at the network location, such that we would perhaps not recommend this as a policy. Our findings do suggest there is a relation between a skilful PII team chairpersons and collaboration. Chairs might have an important role in extracting the maximum information from all involved PII professional team members to come to the best agreements, combining the variety of arguments and insights from the disciplinary perspectives represented in the team in such a way that the total is more than the sum of the parts. Again, future research has to point out whether there is indeed causality, but this first explorative study does at least hint towards the relevance of chairs in this context.

Chapter 5

Estimating Public Performance Bias through a MTMM Model*

Beauty is in the eye of the beholder, and it may be necessary from time to time to give a stupid or misinformed beholder a black eye.[†]

Abstract

Knowing as an organisation how you perform in the eyes of stakeholders is important for (public) organisations, for both legitimacy and normative stakeholder management. This will mean performing well on a range of objective and subjective measures. However, subjective perception measures are likely to be biased. The bias can depend upon the specific stakeholder's position *vis-à-vis* the focal organisation. We show how a multi-trait-multi-method (MTMM) model cannot only determine the validity of performance measures, but is also valuable in generating estimates the potential biases in both method (e.g., respondent type) and trait (e.g., performance measure) of these subjective performance measures. To demonstrate the benefits of this methodology in public management we apply this method to the subjective performance of police forces in 26 European countries.

*This chapter is the result of joint work with Arjen van Witteloostuijn, Arjan van den Born and Les Graham. The article resulting from this chapter has been published in 2013 in *Policy Studies*.

[†]Miss Piggy (text by Jim Henson).

5.1 Introduction

In Chapters 2, 3 and 4, we investigate the relations between variables of interest and the satisfaction or perceived performance amongst stakeholders. Knowing whether stakeholders are satisfied with the performance of the focal organisation can be critical to policy and strategy-making in both the private and public sector. Private organisations will often want to perform well on performance indicators that are important for shareholders, competitors, or parties that have a potential interest in taking over the focal organisation. In these cases, the performance measures that are closest to the satisfaction of stakeholders, also lay closest to measures that are commonly measured by researchers as indicators of organisational performance, such as objective financial performance indicators, product market measures and shareholder return metrics (Richard et al., 2009). In public sector research, the satisfaction of stakeholders with the performance of the focal organisation is not less important, because the organisation holds accountability to the citizenry. The issue of performance measurement is however more intricate, as organisational performance measures are more difficult to construct in the context of not-for-profit organisations. For one, some stakeholders will care about outputs, while other stakeholders will do so outcomes. For example, staying in our policing context, the (local or national) government might require the police to achieve certain outputs, such as police patrols, or a certain percentage of cases solved within a certain period. If the police achieves these outcomes, the respective stakeholders will be satisfied. In other cases, stakeholders will not give a clear 'target', care rather about outcomes, or do not even keep track of any measures of performance that they should supposedly care about. The average citizen does not have frequent contact with the police, and may relate their satisfaction or perception of police performance to how safe they feel, how much police they see on the street, or what they hear in the media.

Given the complexity of performing well in the eyes of stake-

holders, a separate stream of literature focuses on the question as to how public organisations' performance actually should be conceived and how this performance can be measured. Clearly, organisational performance, or what stakeholders can/should be satisfied with, is less straightforward to determine for public organisations because they commonly do not (aim to) make a profit, or do not prioritise on efficiency (Anheier, 2000). To complicate matters further, public organisations often have a range of goals that may be conflicting, serving their variety of different stakeholders (Andrews et al., 2006).¹ This is exactly why public sector studies often use a mixture of different organisational performance measures. While some of these performance measures might be objective, pleasing specific stakeholder groups, many performance measures will likely be of a subjective nature, such as survey information from different groups of the organisation's stakeholders.

An issue that is very important to consider when using subjective performance measures is: Who are (or should be) the judges of performance? Evidently, asking customers rather than producers about customer satisfaction makes perfect sense, theoretically and methodologically. However, perhaps more often than not, deciding on who should be the judge of a public organisation's performance is not so straightforward at all. Given that public organisations tend to feature a set of goals, targeting different groups of stakeholders, an appropriate measure of organisational performance involves multiple indicators, including a mixture of subjective measures collected through surveys among different groups of stakeholders. For example, measuring a university's performance comprehensively requires reliable and valid measures from the perspective of a range of internal and external stakeholders, such as, students, teachers, managers and policy-makers.

¹This is not to say that such issues are irrelevant in the context of private sector organisations. Occasionally, for example, private sector work focuses on subjective measures such as customer satisfaction or managerial assessment. A case in point is the literature on subsidiary performance of multinational enterprises, which oftentimes resorts to managerial perception measures in the absence of deconsolidated financial figures (e.g. Dikova and van Witteloostuijn, 2007).

This implies a methodological challenge, because different stakeholder groups may well be characterised by different perceptual biases. For instance, a university's teachers might consistently overestimate performance as to teaching quality, whereas the university's students may systematically underestimate teaching quality. Obviously, one might argue that perhaps it is the perception of the student that matters here; if the stakeholder is not satisfied, then it is up to the focal organisation to do something about this; or to manage the stakeholder differently. However, if the stakeholder is mostly biased, and does not objectively value the management strategy of the focal organisation, then changing strategy may not change performance much on the expectations of the stakeholder. Suppose the management method of the focal organisation towards the stakeholder is in fact optimal, but the that stakeholder holds a negative bias towards the focal organisation, then trying to tackle the bias might increase the perceived performance, whereas changing the management strategy would not.

In this chapter, we suggest a methodological toolkit designed to examine this issue of stakeholder bias, or respondent bias more generally. Our aim is to raise interest for this topic in public administration, as little has been written about informant bias in the field, to date. The issue is discussed in empirical studies, but nobody addresses the issue in a more methodological fashion, or offers suggestions to solving the issue. In some other fields, such as economics and psychology, informant bias is more frequently studied and accounted for. The issue of performance measurement and bias is highly relevant, not only from a policy perspective, but also from an academic view point. For instance, theoretical advances in any field are highly dependent on empirical (dis)confirmation (Donaldson and Grant-Vallone, 2002). Doing research based on biased measures can lead to support for inflated or deflated relationships (Rogelberg, 2002) and hence invalid conclusions and incorrect support for (or rejection of) a theory. In this chapter we explain and demonstrate an alternative way to determine and filters out biases: the so-called multi-trait-multi-method (MTMM) model. This

model can estimate the magnitude of biases in the answers of samples of different groups of respondents, with the additional feature that it can test the validity of measures, which is important if one wants to measure one type of performance, based on several items. For example, if the police would like to know how satisfied stakeholders are with telephone communication with the police, they might ask a number of questions, related to how fast the call was answered, whether the police officer was helpful and polite, etc. The MTMM model can then show if these questions indeed underlie the greater question of whether the stakeholder is satisfied with telephone communication with the police.

Because the MTMM model does not only test whether there is a bias, but also shows where the bias is, it gives researchers a lot of information about their data, and allows them to make educated decisions about how to proceed with their analysis. The MTMM model is already quite commonly applied in the domain of psychology, and is attracting increasing interest in organisational behaviour and sub-disciplines of the general management field such as marketing and operations management. The methodology has been developed, and is readily adopted, in these and other disciplines, but has yet to gain recognition in the field of public administration. Hence, in this chapter we investigate the following question:

How are MTMM models useful in showing bias in perceived performance of policing in Europe?

We demonstrate the MTMM model by means of an example in policing, to stay as close as possible to the topic at hand. We analyse unique data available from the European Social Survey (ESS) to study biases in the opinions regarding three indicators of police performance (i.e., catching burglars, arrival times, and taking bribes) of police employees and two groups of external stakeholders: corporate managers and healthcare professionals. The MTMM model we estimate in this policing example is used to answer two specific questions: (1) Do the subjective performance measures

used in the ESS offer an adequate assessment of overall police performance as perceived by respondents?; and (2) Are police employees more biased in assessing police performance than external stakeholders? We show that by applying a MTMM model we are able to estimate trait, method and error variance, and thus to establish any biases amongst samples of different types of professionals (i.e., police employees, corporate managers, and healthcare professionals). Moreover, we illustrate how this model can be applied to evaluate the convergent validity of survey items, which provides further information about their appropriateness as performance measures (in our case, regarding policing organisations).

With this chapter, we aim to make several contributions to the existing literature. Our main contribution is methodological: We introduce the MTMM model in the field of public administration as a toolkit to examine and potentially overcome biases in subjective organisational performance assessments across different stakeholders. In so doing, we hope to enrich the debate on the use and appropriateness of subjective performance measures in public organisations. We show that the MTMM model does offer a very useful and robust methodology when applied to the study of public sector performance. Combining the MTMM methodology with the use of various subjective performance measures can be a great alternative to the current practice where performance is still often measured by questioning a single type of respondent (e.g. operations manager) or class of respondents (e.g. employees). Moreover, we illustrate the practical usefulness of the MTMM model in European policing, focusing on differences between 'insider' and 'outsider' stakeholder groups. Finally, this chapter adds to the literature on organisational performance, generally, where the MTMM methodology has only rarely been used, to the extent of our knowledge.

5.2 Literature review

5.2.1 Performance measurement in the public sector

Boyne (2002) divided available performance measures regarding public and private organisations under five headings:

1. Outputs - both quantity and quality;
2. Efficiency - cost per unit of output;
3. Service outcomes - such as impact and equity;
4. Responsiveness - such as consumer and staff satisfaction;
5. Democratic outcomes - such as participation and accountability.

As one can see, many of these performance measures are based on perceptions of stakeholders, clear examples being consumer and staff satisfaction. A well-established insight in the cognitive psychology of perception is, however, that any judgement of the performance of oneself or someone else is very likely to be biased. Research has abundantly shown that people tend to overestimate their own performance on a variety of items. For example, people overestimate their own popularity (Zuckerman and Jost, 2001) and how well they can drive a car compared to others (McCormick et al., 1986). In the case of organisational performance, Safizadeh et al. (1996) report that average performance as perceived by managers is improbably far above the industry average. In case of the police, this is probably no different (Graham et al., 2012).

These biases, inherent to subjective performance measures, have stimulated the emergence of the popular 'performance indicator movement' (Bird et al., 2005), which promotes the use of "hard" or "objective" public service performance metrics. Despite the popularity of this movement, in practice, perceptual or "soft" or "subjective" measures are still frequently used in public and private

management studies.² This is understandable. Not only are non-perceptual measures often simply unavailable, but, more importantly, objective measures often do not cover all the dimensions of organisational performance that really need to be measured. Particularly in service sectors, maximising (financial) outcomes is less important than using those outcomes to learn from and to improve customer service and performance (Vargo and Lusch, 2004). Furthermore, public organisations typically have to satisfy multiple objectives (Andrews et al., 2006), although public managers can be incentivised to focus on specific targets commonly known to be measured by performance management systems (Clarkson et al., 2009; Wilson et al., 2006), which are likely to be important to only a limited number highly influential stakeholders, like governments. All this implies that for measuring organisational performance, especially in public organisations, using a diverse set of objective and subjective performance gauges often leads to the 'best' estimate of overall organisational performance. Just asking a single source how they feel about their own performance or that of their organisation tends to be associated with a systematic bias. We argue that the appropriate design is often to involve multiple sources from a variety of different stakeholders.

Andrews et al. (2011) reviewed 85 studies from major public administration journals that use and/or analyse measures of organisational performance in the public sector. They report that the large majority falls into the categories outlined by Boyne (2002). A majority of the studies rely on non-perceptual administrative measures (52), while a smaller number (22) only uses perceptual survey information. A small number of 11 studies include both administrative and survey measures to construct public service performance in-

²The "objective" versus "subjective" and "hard" versus "soft" terminology is misleading, as many so-called "hard" or "objective" metrics can be quite subjective. From here on, in this chapter, we therefore refer to perceptual versus non-perceptual measures. Perhaps, measures of attitudes and perceptions, rather than the (semi-)hard facts, are more appropriate organisational performance indicators anyway, keeping in mind Andrews et al.'s (2006) observation that public service beauty is in the eye of the stakeholder.

dicators. Administrative measures are metrics collected and published by government organisations, while surveys are generally conducted amongst citizens and other stakeholders by academic researchers. The administrative metrics may not necessarily map perfectly onto the survey measures, but having the former combined with the latter provides both an internal and an external perspective on organisational performance indicators. A few studies use both managers' and citizens' opinions on items such as customer satisfaction (Walker et al., 2011) and organisational effectiveness (Meier and O'Toole, 2013).

Andrews et al. (2011) also looked into the 11 studies that used both administrative and survey measures. They conclude that, in general, which measure was used did not really matter for the conclusions. Hypothesised relations between drivers for public service performance are confirmed equally well for administrative *vis-à-vis* survey measures of public service performance. However, the few studies that combine managers' and citizens' opinions on public service performance produce different insights. The relation between performance drivers and subjective performance assessed by managers is less strong than that between the performance drivers and subjective performance evaluated by citizens. Although realising that more work is needed before strong conclusions can be drawn, they suggest that public managers may well underestimate the effects of their activities on performance as perceived by citizens. What is clear, is that the perceptions of different groups of respondents are not similar, as the citizens' opinion is more strongly connected to the performance drivers than that of the managers. The difference may be due to an informant bias, possibly on the side of the managers, but there is no a priori reason to assume that citizens' are not biased.

What we can conclude from the extant literature is that the number of established performance measures in public sector studies is plentiful, both in non-perceptual and perceptual terms. Researchers may want to use either type of performance measures in their work, and preferably even both, to get a good idea of overall

performance on the expectations of a diverse group of stakeholders. However, just like in any other discipline, researchers of public organisations have to be cautious when using subjective measures. The existence of biases has not only been proven, but also the idea that people may perceive phenomena differently is common sense.

To the best of our knowledge, too little attention has been paid to the respondents' biases in public administration research, to date. The subjective measures are often implicitly, but wrongly so, assumed to be unbiased, while other disciplines have advanced, discussed and adopted new methodologies to initially validate their performance measures. We suggest that also in the field of public administration methodologies need to be used that (a) can estimate the direction and magnitude of these biases so that (b) these can be controlled for statistically and/or (c) can be accounted for whilst interpreting the evidence. A suitable tool for such an assessment of biases is the MTMM model.

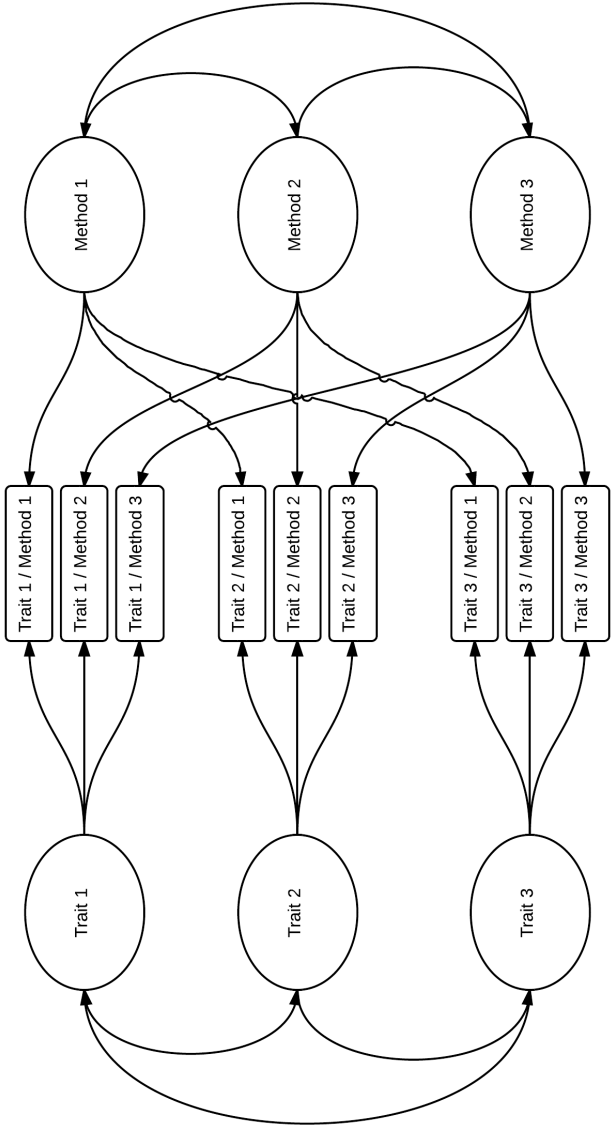
5.2.2 The multi-trait-multi-method model

The MTMM model offers a toolkit to examine potential biases in measures on the basis of subjective assessments of "raters" or respondents, or other so-called "methods". Figure 5.1 visualises the MTMM model. The 'traits' are the different constructs that are being measured, which could, for example, be different measures of organisational performance.

The original MTMM matrix by Campbell and Fiske (1959) is already common ground for public administration researchers testing the convergent validity of their measures. It has developed since the 1960s into a more complex confirmatory factor analysis methodology, which offers a systematic toolkit to assess trait, method and random error variance by means of sophisticated statistical software.

The central argument behind the MTMM model is that variance stems from this set of three sources. The first source is the (1) *trait* - that is, the variance in what one actually tries to mea-

Figure 5.1: Example of a MTMM model



sure. True score theory (Lord et al., 1968) suggests that we can assume that each organisation has a true or "objective" performance score (or any other score, for that matter) that we try to measure. However, the measured subjective score can be disturbed as a result of types of respondents who structurally over- or underestimate the performance score. This is what is referred to as variance due to the (2) *method*. Method can be defined in broader terms, but here this relates to the variance caused by different types of raters or respondents, providing biased assessments regarding the same items. Then, raters are not capable of giving an "objective" subjective score of performance. Such variance may lead to serious bias in parameter estimation (Doty and Glick, 1998).

Finally, disturbance can come from (3) *random error*, a variance unique to the indicator. This can occur for a variety of reasons - for example, because the respondent has no clue what the performance score is, or doubts between different assessments. Because of the random nature of this source of dispersion from the "objective" performance score, this type of variance should not challenge parameter estimation to the extent that method bias does. However, random error variance, too, frustrates the construction of the reliable and consistent measures that researchers so much desire. Obviously, high trait variance (as this is the type of variation that we seek to understand) and low error and method variance (as these disturb the reliability and validity of our measures) would be suggestive of a good indicator. In this case, a researcher may come close to measuring a "subjective" performance score that is "objectively" rated, and hence close to the "truth". When finding low trait variance, the appropriateness of an indicator and/or the respondents who have been included in the rater sample should be seriously questioned.³

It can be a bit difficult to understand how one can measure a

³If low trait variance does not come as a surprise, then any scholarly study is pointless, as we cannot expect to find any meaningful results with variables that are characterised by low variance anyway. In our example, this would mean that all police organisations perform equally bad or good, implying that studies seeking to explain variance in performance are a dead end.

'true' score, when talking about subjective questions. Here a reference to the book *The Wisdom of Crowds* (Surowiecki, 2005) may make our logic clearer. The main idea is that that a diverse collection of independently deciding individuals is likely to make certain types of decisions and predictions better than single individuals or even experts. Surowiecki gives numerous examples of this, such as guessing the weight of an ox at a county fair. Despite that many of the guessers had no knowledge of cattle, the average guess was only 1 pound lower than the actual weight. The average guess was closer to the actual weight than any individual guess, including those of experts. That this works in practise is because individuals make independent guesses - there is no bias. Error is random, so by taking the average of all observations that cancels out, leaving the 'true score'. Of course, this is more straightforward when there is an objective answer. However, Surowiecki argues that this can work equally well for more subjective issues. We have a standard, not necessarily a high one, which allows us to give a good approximation of whether a particular strategy is good or bad, or a success or a failure.

Apart from measuring the 'true' score, the MTMM model has another merit. The MTMM model shows that different groups of people structurally deviate in their perception based on a characteristic, such as their profession. This is still interesting for researchers to know and to take into account when they are conducting a study with respondent data. It still warrants for researchers to think in advance about their respondents, whether they want a particular group, or groups that do not structurally differ, or perhaps rather random assignment.

This MTMM model is frequently used in the field of psychology to assess measurement scales, and has its roots there. Byrne and Bazana (1996), for example, study the assessment of social and academic competencies in children by parents, teachers, peers, and the children themselves. They find that, for pre-adolescent children, perceptions are best estimated by children themselves and their parents, but adolescent children are best judged on academic

competencies by teachers and on social competencies by peers. Epkins (1994) asks similar informants about the depression, anxiety and aggression of children, but find that they are in overall agreement of the children's behaviour, again using an MTMM model, indicating that the scales commonly used for such research are appropriate for different informants.

The MTMM model is used less in assessing organisational performance. Ketokivi and Schroeder (2004) find this unfortunate, because the MTMM model is more nuanced, and provides more information, than do the established inter-rater reliability or inter-rater agreement statistics, which are popular methods in empirical studies in operations management and other fields in private and public management. In their study of subjective performance of manufacturing plants, they compare the responses of the plant manager, research coordinator, and supervisor. They find both large method and error variance, concluding that, despite the validity and reliability of measures, the use of multiple informants is necessary in order to achieve unbiased results. Venkatraman and Ramanujam (1987) use a MTMM model to show that senior-level managers (e.g., CEOs) are not as biased in their assessment of firm performance than many researchers argue they are, but also warrant the use of multiple informants to control for potential biases. Blindenbach-Driessen et al. (2010) make use of an MTMM model in their study of innovation projects to show that the success of such projects needs to be judged based on both operational performance and product performance. They find that project leaders appear to be better informed to assess operational performance, while innovation managers are better capable to assess product performance.

To the best of our knowledge, the MTMM model is not at all used in the field of public administration to assess biases, but the literature gives several examples of where an MTMM model can be put to good use. We believe that the MTMM model could offer a worthwhile contribution for public administration studies. Similar to studying how a bank or manufacturing plant performs, one could also question how governmental organisations perform

(for instance, after a policy shock). Performance measures that have been analysed by a MTMM model, give researchers more information about how (un)biased such methods are. Hence, it allows them to control for biases or, if necessary, develop other measures. By means of an example in policing, we will illustrate the added value of the MTMM model methodology above and beyond the standard methods. We will go through this example as if we were preparing the data for analysis. Hence, apart from demonstrating the bias-detecting capabilities of the MTMM model, we will show how this toolkit can be used to check for convergent and discriminant validity, and discuss other sources of hazard that can be encountered when doing a MTMM model with subjective performance measures.

5.2.3 A policing example

The measures of police performance that can be found in the literature overlap with the five performance measurement categories of Boyne (2002), to some extent, but also seem to be lagging behind in advancement *vis-à-vis* other public sector industries. Collier (2006) reflects upon the state of the art in the development of performance indicators in policing by summing up a few findings. The focus has primarily been on indicators that force accountability upon police forces in terms of organisational efficiency and solved crimes. In policing, the focus is on "raw" numbers and "hard" metrics, but these can be difficult to work with as "objective" performance measures, such as crime rates, are influenced by a large number of other variables (such as unemployment or income distribution). We agree that as a statistical hurdle, much can be overcome by researchers if they have a decent research design. Stakeholders, however, who do not (always) do the statistical analysis, may be inclined to make assumptions about relations that may in fact not be there. Additionally, the focus on efficiency indicators of policing provides a one-sided perspective on policing performance, as some stakeholders not necessarily favour an efficient police force, but rather a police force that carries out its tasks well. Despite the

increased focus on stakeholders in the public sector domain, little attention has been paid to perceptions of policing "clients". So, turning to subjective measures by consulting stakeholder groups would clearly add to police performance studies.

When introducing subjective measures, the issue of systematic bias among stakeholder groups cannot be ignored. For example, a bias is likely to occur when asking internal (police officers) or external stakeholders (citizens, or public prosecutors) about policing performance. A recent study by Graham et al. (2012) posed police performance questions to a set of 382 policing professionals and 59 external stakeholder representatives such as union representatives, mayors and public prosecutors. Respondents were asked how well the police perform on the requirements of formal authorities, *vis-à-vis* the expectations of external parties, and compared to their internal priorities. They were also asked to what extent police's internal priorities were aligned with the requirements of formal authorities and the expectations of external parties. It was found that policing professionals are (significantly) more satisfied with their performance on these items than are the external stakeholder representatives. This confirms the perception bias reported in many cognitive psychology studies.

5.3 Methods

5.3.1 Data

The data for this analysis were collected as part of the fifth round of the European Social Survey (ESS), conducted in 2010 (European Social Survey, 2010).⁴ The ESS is a bi-annual multi-country survey that addresses the attitudes and behaviours of people across European countries over time. Five rounds of the survey have been conducted since 2002, and data are freely available for non-profit usage. The survey is identical in all countries and has been subject to a careful translation strategy to ensure that translations

⁴The data set is available at <http://ess.nsd.uib.no/ess/round5/>.

are appropriate (European Social Survey, 2009). It makes use of strict random probability sampling, a minimum target response rate of 70 per cent, and rigorous translation protocols (Başlevent and Kirmanoğlu, 2012). The hour-long face-to-face interview includes questions on a variety of core topics repeated from previous rounds of the survey, and a module developed specifically for Round 5 only covering 'trust in the police'. Data on more than 650 variables was collected in 2010 in 26 countries.⁵ Our focus is on the policing variables and the occupation of respondents. Hence, we only use a small portion of the data.

The data for our analysis comes from three types of informants: (1) *police employees* like police inspectors, crime detectives and police officers; (2) *corporate managers*, being defined as respondents who, as directors, chief executives or department managers, manage enterprises, organisations or departments that employ a total of three or more managers (ISCO 88 definition); and (3) *health-care professionals*, including a range of doctors, nurses, midwives, dentists, pharmacists, medical assistants, psychologists and social work professionals. We decided to work with respondents from these three different professional groups for four reasons. First, given this study's purposes, we need to have different kinds of raters. Second, for statistical reasons, three or more groups of raters are generally preferred when using a MTMM model (Cote, 1995). Third, as we have data from 26 European countries, we selected professional groups with relatively large sample sizes. Fourth, this set of three professional groups nicely reflects different perspectives - internal (police employees) versus external (corporate managers and healthcare professionals), and from primarily the private (corporate managers) versus the public sector (healthcare professionals).

Different occupational or professional groups are likely to have

⁵Countries included are Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Israel, the Netherlands, Norway, Poland, Portugal, Russian Federation, Slovenia, Slovakia, Spain, Sweden, Switzerland and Ukraine.

a different perspective on policing. A bus driver may have different perceptions of the police *vis-à-vis* a plumber or a teacher. Yet, due to the size of our dataset, we have decided to define broader categories of respondents' occupations or professions that we believe to have a similar professional identity. Specifically, we include healthcare professionals based on the suggestion of Hunt and Arend (2002) that healthcare professionals may have a biased view on policing due to their focus on individual patients rather than on society at large. We have extended this occupational group to professionals with a similar focus, but who work in emotional healthcare, to increase our sample size. We believe that these professionals have a similar view on client priorities, and thus serve the purpose of our demonstration. Corporate managers are included because they may be primarily driven by financial motives in their work, rather than by people. Our argument is that their focus on efficiency may influence their perception of the performance of a public organisation such as the police.

For our demonstrative purposes, we choose professional groups that we believe are likely to have different opinions and ideas about policing and police performance. Evidently, when doing a study, a researcher may rather prefer to choose respondents who he/she believes are not too biased, and use a MTMM model to validate these beliefs. These are merely examples to illustrate the use of the MTMM methodology. We want to stay as close as possible to the topic of stakeholder management in policing, and that is why we chose these readily available data (and professional groups) from the European Social Survey.

5.3.2 Measures

All respondents have provided answers to three questions: (1) How successful are the police at catching house burglars in your country? (with a scale ranging from 0 = extremely unsuccessful to 10 = extremely successful); (2) How quickly would the police arrive at a violent crime/burglary scene near to where you live? (with a scale ranging from 0 = extremely slowly to 10 = extremely quickly); and

(3) How often do the police in your country take bribes? (with a scale ranging from 0 = never to 10 = always). Our choice concerning the variables to include was restricted to the items that are in the ESS of 2010, but we believe that this set of ESS items serves our purposes very well, for both substantive and statistical reasons. The lack of a common assessment scale substantially reduces a potential source of common-method bias (Chang et al., 2010a; Podsakoff et al., 2003). Common-method bias is variance that is attributable to the measurement method, often caused by the use of single respondent surveys (Chang et al., 2010a). Furthermore, because answers are given on a ten-point scale, extreme multivariate non-normality is unlikely, as the answers can be more dispersed. Moreover, we may expect that all three variables are correlated: A well-performing police force solves crimes, arrives in time, and does not take bribes (as bribery negatively affects execution of core policing tasks).

Our sample consists of 267 police employees, 3,592 corporate managers and 1,969 healthcare professionals. We used the *cem* command in Stata SE 12 to force case-to-case matching of corporate managers and healthcare professionals with police employees in the sample by country. By forcing case matching by country we ensure that ratings are given with reference to the same country. This implies the assumption that our subjective performance measures are roughly equal at a national level, but differ across countries. The number of observations is too low to generate a statistically meaningful match at a regional level. Because of the limited number of police employees in the sample, we ended up with a dataset with 225 cases of ratings on three subjective performance variables for three different rater groups. Raters have been sorted on age by country in an attempt to match younger and older raters at the country level, as our dataset was too small to exactly sort by age (or an age category). We have tested in Stata SE 12 whether there was a significant within-occupation difference between males and females in their opinions about police performance, and found this not to be the case, ruling out a gender effect. We have used Amos

20.0 to estimate our model.

5.4 Results

5.4.1 Mean comparisons

An initial suggestion for respondent bias may arise from significant mean differences. The mean differences on our measured variables for the different professional groups are reported in Table 5.1. The *t*-tests reveal that police employees are significantly more positive about their performance than both external rater groups - corporate managers and healthcare professionals - on all the subjective police performance variables. They believe to arrive quicker at a crime scene, to catch more burglars, and to take fewer bribes. So, in these data, too, a systematic rater group-specific bias can be observed. Whether this is only a positive bias on the side of the police or also a negative bias on the side of the external professionals will be assessed in our MTMM model. Moreover, estimating a MTMM model produces insights as to the relative bias per different respondent category, as well as *vis-à-vis* both other sources of variance (trait and random error).

Table 5.1: Mean comparison

Variable	Method	Mean	Significantly different from police perspective (p <0.001)
Arrival time	Police employees	6.92	-
	Healthcare professionals	5.74	Yes
	Corporate managers	5.68	Yes
Catching burglars	Police employees	5.64	-
	Healthcare professionals	4.37	Yes
	Corporate managers	4.39	Yes
Taking bribes	Police employees	2.51	-
	Healthcare professionals	4.09	Yes
	Corporate managers	4.28	Yes

5.4.2 Statistical assumptions

A reasonably multivariate normal distribution is an assumption regarding maximum likelihood estimation of a MTMM model (Byrne, 2001; Jöreskog, 1979). We have tested for excess skewness and kurtosis, as our ten-point scale variables do not satisfy the normality assumption. The skewness and kurtosis statistics of individual items range between $[-0.64, 0.96]$ for skewness and $[-0.53, 0.62]$ for kurtosis, suggesting no problems with the individual items (Byrne, 2001). Moreover, Mardia's (1970) coefficient of multivariate kurtosis is 1.27, which is indicative of no problems, too (Bentler, 2005). Hence, we do not have to doubt the appropriateness of our estimation technique.

5.4.3 Model fit

Analysing MTMM data using confirmatory factor analysis (CFA), Doty and Glick (1998) suggest that the following nested structural equation models, as illustrated in Figure 5.2, should be estimated and tested to show whether or not improvements in model fit can be observed (Ketokivi and Schroeder, 2004):

1. The null model of independent variables, which posits that all measures of performance are unrelated to each other;
2. The trait model, which assumes that all measures of performance correlate because of a common underlying performance trait; and
3. The trait-method model, which implies that measures of performance correlate because of performance trait and methodological reasons.

Given the data we have, we decided to let our methods (i.e., the opinions of our three different respondent categories) co-vary, although this is optional. The CFA nature of the model only requires co-variances between the traits - that is, the three different measures of performance, in our case. MTMM models are notorious

for model-fitting issues such as under-identification (Byrne, 2001; Cote, 1995; Marsh, 1989), but our model works fine under these co-variance paths. We might, however, also expect that co-variances exist between methods, even though respondents may be biased. If the police, in fact, perform well, they may receive more positive perceptions from all occupational groups than when they perform poorly.

The overall model fit statistics are provided in Table 5.2, together with the improved model fit statistics. We report the Root Mean Square Error Approximation (RMSEA), Comparative Fit Index (CFI), and the Tucker-Lewis Index (TLI). These are common model fit statistics, indicating a good model fit when RMSEA < 0.05, CFI > 0.9 and TLI > 0.9 (Byrne, 2001).

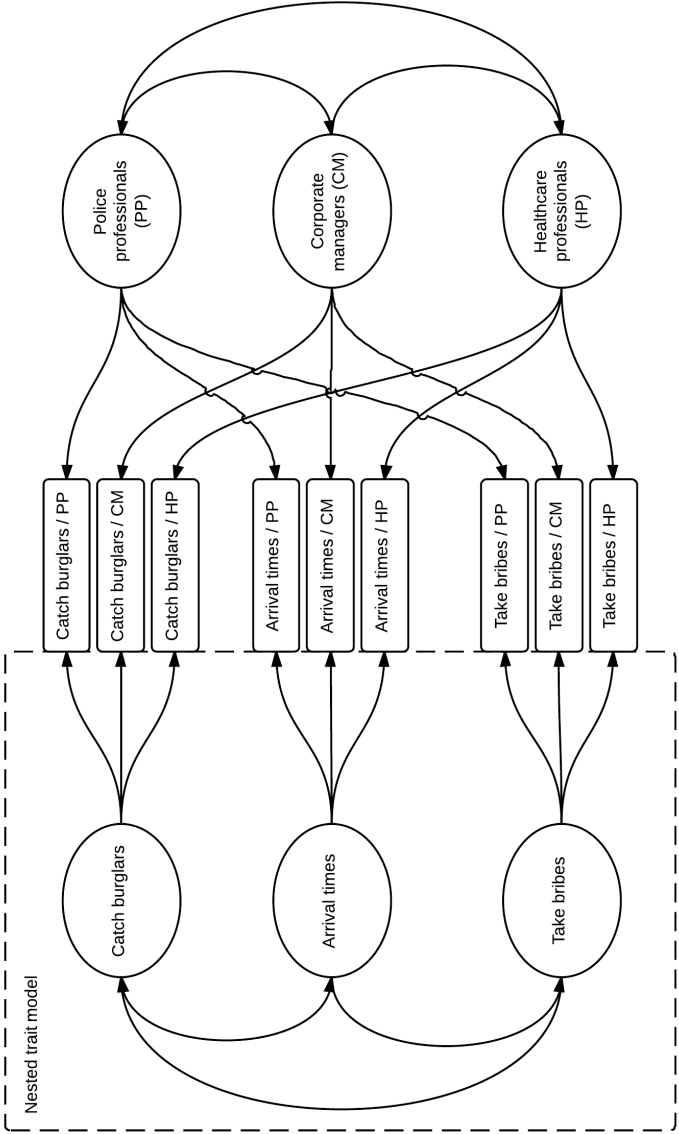
The χ^2 statistic of the null model is 371.1 with 36 df ($p = 0.000$). Evidently, the model is misspecified, which also becomes clear from the model fit indices. This is not surprising, as we would expect significant correlations in our model, which contributes to lower model fit. The trait model performs significantly better than the null model, but still shows a very poor fit. We, again, conclude that the model is misspecified. We add method factors to the model to improve fit. Having done this does indeed increase the fit of the

Table 5.2: Overall model fit and comparison

Model fit	χ^2 statistic	df	P-Value	RMSEA	TFI	CFI
Null model	371.1	36	0.000	0.204	0.000	0.000
Trait model	19.9	24	0.000	0.253	0.502	0.502
Trait-method model	8.5	12	0.744	0.000	1.031	1.000

Model comparison	χ^2 statistic	df	p-value
Null model - trait model	18.2	12	0.000
Trait model - trait-method model	182.4	12	0.000

Figure 5.2: Trait-method model with nested trait-model shown within the dotted lines
(error terms excluded for clarity purposes)



model significantly, now showing a good fit on all the indices.

5.4.4 Convergent and discriminant validity

To answer the question as to whether or not our set of three subjective performance variables form a good overall measure of police performance, we must first look into the issues of convergent and discriminant validity. These are the more popular uses of MTMM matrices opposed to establishing the sources of variance. Convergent validity is the degree to which measures of constructs that theoretically should be related, are in fact related; discriminant validity is the degree to which measurements that should not be related, are in fact unrelated. As far as convergent validity is concerned, we expect the different variables that measure police performance to be correlated, as they try to measure the same underlying construct.

The convergent validity of our variables is reflected in the factor loadings Byrne (2001). Table 5.3 gives these loadings. Between parentheses, we indicate from which rater group the answer originates.

None of the trait factor loadings on the 'catching burglars' and 'arrival time' variables is significantly different from zero, which signals little convergent validity. Also, the factor loadings on methods are generally larger than those on traits. This suggests that the method effects (e.g., respondent type) attenuate the trait effects (e.g., subjective performance measure), implying another sign of little convergent validity. In all, the evidence reveals that our three variables are separately not good measures of a common underlying police performance. This could perhaps be expected as to the corruption item, but is more surprising for the items relating to arrival time and catching burglars. Apparently, these variables are too different from one another to jointly measure the same underlying police performance construct properly. One would usually hope to find convergent validity when studying performance measures that are supposed to measure the same construct. However,

Table 5.3: Trait and method loadings for the trait-method model

Factor	Variable	Estimate	Police professionals	Corporate managers	Healthcare professionals
Catching burglars	Succes catching burglars (PP)	.248 ^a	.711		
	Succes catching burglars (CM)	.179 ^a		.851	
	Succes catching burglars (HP)	-.148 ^a			-.315
Arrival time	Arrival time police (PP)	-.107 ^a	.687		
	Arrival time police (CM)	.149 ^a		.648	
	Arrival time police (HP)	.403 ^a			.868
Taking bribes	How often take bribes (PP)	.484	-.477		
	How often take bribes (CM)	.651		-.411	
	How often take bribes (HP)	.416			.527

^a = not significant at p < .05.

even when the data demonstrate validity, this does not mean that there is no bias as Ketokivi and Schroeder (2004) also show.

To examine discriminant validity, which demonstrates whether concepts or measurements that are supposed to be unrelated are, in fact, unrelated, we look at the correlations between factors. In order to have discriminant validity, we would need to find low correlations amongst the trait and method variables, which are displayed in Table 5.4.

Table 5.4: Factor correlations

Measures		Estimates	
Catching burglars	↔	Arrival time	-.455
Arrival time	↔	Taking bribes	-.443
Catching burglars	↔	Taking bribes	.613
CM	↔	PP	.138
CM	↔	HP	.168
PP	↔	HP	.052

Given our assumption that the three subjective performance items measure the same underlying construct (i.e., police performance), our prior is to find significant correlations between factors. However, in fact, this is not what we observe in Table 5.4. Hence, we find evidence of discriminant validity. Again, this does not imply evidence that there is no method bias in the data.

5.4.5 Estimating trait, method and random error variance

As we have a good model fit of our data with our MTMM model, we can estimate trait, method and random error variance by calculating the squared standardised factor loadings for trait and method, with the remaining variance capturing random error. The findings are shown in Table 5.5.

Table 5.5 suggests that the method and random error are the

Table 5.5: Trait, method and error variance in the trait-method model

Performance measure	Respondent	Source of variance (%)		
		Trait	Method	Error
Catching burglars	Police employees	6 ^a	51	43
	Corporate managers	3 ^a	72	24
	Healthcare professionals	2 ^a	28	70
Arrival time	Police employees	1 ^a	47	52
	Corporate managers	2 ^a	42	56
	Healthcare professionals	16 ^a	75	8
Taking bribes	Police employees	23	23	54
	Corporate managers	42	17	41
	Healthcare professionals	17	10	73
Mean		13	41	47

^a = not statistically significant at $p < .05$.

main causes of variance within the measured items, with random error generating the largest variance of, on average, 47 per cent. Method variance is significant for all factor loadings, indicating its presence as to all variables, averaging at 41 per cent.

Table 5.6 reveals that police employees are, on average, not much more biased than the two external rater groups. On the one hand, corporate managers are extremely biased about the successfulness of the police in catching burglars. On the other hand, healthcare professionals are very biased about policing performance regarding arrival times. Hence, the difference in subjective performance seems to be positively driven by police employees, on the one hand, but negatively driven by both external rater groups, on the other hand.

The trait bias is significant regarding the measurement of the 'take bribes' variable, but is not significant for the other variables. This finding, again, suggests that the three items do not measure the same underlying common police performance construct. The

Table 5.6: Mean variance by method

Method	Mean variance (%)		
	Trait	Method	Error
Police employees	10	40	50
Corporate managers	16	44	40
Healthcare professionals	12	38	50

significant findings for the ‘take bribes’ variable reveal that especially corporate managers evaluate this police performance indicator well. This result is possibly due to corruption being a national trait that is intertwined through all (public) service sectors. In countries that score high on corruption (e.g., the Russian Federation), it may be common knowledge that bribery is a likely event; in contrast, in countries that score low on corruption (such as the Netherlands), respondents agree about the low likelihood that a police officer can be bribed. Corporate managers may be more aware of how easily police officers can be bribed, as they are more often in a position where they (want to) give bribes, while police employees and healthcare professionals are more likely to (want to) take bribes.

5.5 Discussion

This chapter aimed to introduce, discuss and demonstrate the use of MTMM models in public administration studies to improve subjective performance measures. We argued that the use of subjective performance measures in the public sector is warranted, as objective measures often do not give a good overview of the performance on the expectations of all stakeholders. Furthermore, they are sometimes difficult to obtain and/or process. Yet, little attention is given to assessing the validity and especially biases of such subjective measures. We proposed the use of an MTMM model, as this offers an integrated approach to examining both biases and va-

lidity. This is important, because a valid measure does not necessarily make an unbiased measure. Furthermore, the MTMM methodology can demonstrate where the bias occurs, so that researchers can take appropriate corrective measures in further analyses. We demonstrated the uses of an MTMM model by means of an example in regarding subjective performance of police organisations. This is an interesting case, as objective measures of police performance are notoriously difficult to handle due to, amongst other things, the broad array of stakeholders that the police has to please. It has to do well on certain 'hard' measures or sometimes even targets set by the government, yet they also have to please other stakeholders and the citizenry as a whole. Our results show that the majority of the variance regarding individual items is due to method or random error. The high error variance is consistent with other findings in the literature on organisational performance (Ketokivi and Schroeder, 2004), but our method variance is relatively high and trait variance is relatively low. Furthermore, all items are associated with significant method bias for all three rater groups. Hence, not only are police employees positively biased about their own performance, but also are both external rater groups - corporate managers and healthcare professionals - negatively biased about subjective police performance. We find substantial difference in the variances across our three rater groups at the indicator - or trait - level. Corporate managers are more biased about the police catching burglars, while healthcare professionals are more biased about the police's arrival times. Overall, however, the mean variance does not differ that much for different professional groups. They are all biased to a fairly large extent. Moreover, a large random error component indicates that they may lack the knowledge to make a judgement. This even holds for policing employees. The "take bribes" item is associated with the largest trait variance.

The outcomes of our MTMM model estimation also offer evidence as to the degree of validity of the subjective assessments as performance measures. In our example, we cannot be too positive about our three subjective variables as reliable measures of

a single underlying police performance construct. The low convergent and high discriminant validity indicate that the three variables may be too different to measure the same underlying construct, and all three items suffer from substantial method bias. With all respondents exerting a bias in answering all three police performance assessment questions, an "objective" and overall subjective police performance measure cannot be constructed. This illustrates how the MTMM model methodology can produce very insightful measurement diagnostics, assessing convergent and discriminant validity, as well as the sources of potential bias.

We believe that our policing example shows that the MTMM model can offer a valuable methodological contribution to the field of public administration. Looking at the convergent and discriminant validity of variables can only provide part of the answer as to the appropriateness of subjective organisational performance measures. To date, little attention has been paid to the possible biases that can occur when using such subjective measures. Our example makes clear that the perceptions we have measured are based mainly on method and random error, and not trait - an observation that holds true across three different rater groups. When trying to estimate (causal) relations between measures, letting the potential biases go unnoticed may fatally hurt the reliability and validity of findings. Hence, applying the MTMM model methodology in future public administration work would greatly facilitate the development of decent subjective measures of public organisations' performance.

5.5.1 Limitations and future research

Although our study was primarily meant to introduce a new methodology to the public administration literature, dealing with the key issue of respondent groups' systematic biases, the limitations associated with our empirical example hint at potential issues that researchers can stumble upon before or during the execution of an MTMM model. The main limitations of our empirical example follow from the number of observations and the nature of the data.

First, matching professionals by country implicitly assumes that police performance within a country is similar everywhere, ignoring within-country variation. The important thing in MTMM models is that we try to ask different respondents a question about the same thing, because we are not going to be able to measure a 'true' score if we ask respondent A to rank an apple and respondent B to rank a pear. As respondents are likely to answer questions relating to what they know - i.e., their locality - region-level matching would imply a step forward. Obviously, the police in some regions of a country may outperform the police in other regions, especially in larger countries and/or in nation-states with decentralised police forces. This may have driven the low trait variance on the catching burglars and arrival time variables, which both may be perceived to be locally differentiated. In contrast, taking bribes may be a more stable characteristic of a country as a whole. Researchers should be aware that in any case, in order for MTMM models to come to good results, many observations are needed, preferably at least five observations for every variable in the model (Hair et al., 1998). MTMM models with few observations will not only be unreliable; they have a higher probability of producing errors. Furthermore, we would like to add that matching respondents on nationality does not control for country fixed effects in this example, because here they relate to the different types of variances related to the professions of respondents, rather than their nationality.

Second, another possible limitation involves the manner in which questions were asked in ESS. When constructing organisational performance measures, empirical studies regarding private businesses tend to focus on an organisation's relative performance *vis-à-vis* competitors (Dess and Robinson, 1984; Ketokivi and Schroeder, 2004). Trying to answer how well a firm performs may be difficult when not assessing a focal organisation's performance compared to similar others, and lead to unnecessary bias and error in the responses because informants have no reference point. In public sector studies, adopting relative performance measures would offer similar advantages. In our empirical example, it would be interest-

ing to explore how respondents feel a focal police force performs compared to forces in other regions or countries. This may well give higher trait variance for police employees, as they might be more aware of how many burglars they catch compared to other forces, in contrast to the general public. Asking the 'right' questions is evidently not something researchers can do when testing existing public performance scales, but can be taken into account when creating new measures.

Related to this, we can also add another critique on these questions posed in the ESS survey. Although these questions are perhaps interesting to make an international comparison of how people perceive police in their country, it is not so clear what gets measured with these survey questions. It is more about how people deal with a question like this, than about police performance, because we are not sure which police force they are actually judging. As such, these survey questions appear to be rather meaningless. We have used these questions for this chapter merely for the illustrative nature; we did not want to dwell too far from the policing topic, and the ESS data were readily available with sufficiently large samples for analysis. However, these are typically not subjective measures on which one would like to base police performance. Arrival times, catch-rates and corruption are surely concerns of citizens, but our data show that citizens are to a large extent unknowing or biased about these measures. Other stakeholders, such as governments, will rather care about the actual objective figures than the subjective (heavily biased and erroneous) perceptions of citizens. Subjective performance measures will be of better use in more specific cases, such as satisfaction with telephone contact, or treatment at the reception of a local police station. Preferably one should ask people who (can) give an (objective) opinion about this, at least people who have actually experienced contact with the police on the phone or at a local police station.

Yet, we would not completely like to discard the type of measures that we have used in this chapter. If we look at it from a stakeholder management and stakeholder satisfaction angle, these

may still be interesting measures to look at. Scores on these items, whether it is response time, likelihood to be caught or bribery, will well say something about how satisfied the public is with the police. Trust in the police and the legitimacy of the police as an organisation might be negatively influenced if stakeholders think they are corrupt or doing a bad job. If the police find low scores on their perceived performance, based on error or bias, then possibly the police can benefit from educating the citizenry or organising positive campaigns to diminish negative biases.

5.5.2 Policy implications

MTMM models do not only allow for the study of convergent and discriminant validity, which was already common in public administration, but additionally assess (a) the appropriateness of the chosen groups of respondents (method) and (b) the importance of different sources of variance (namely trait, method and error). The MTMM model could prove to be a good instrument in finding better subjective organisational performance measures. Evidently, asking the opinion of people who feature a severe bias, or who simply have too little knowledge of the topic, may distort the results when such measures are used in determining the drivers of organisational performance. It may inflate or deflate relationships between constructs, leading to incorrect conclusions (Rogelberg, 2002). The MTMM model methodology forces researchers to consider not only how they measure performance, but also by means of asking whom. We would recommend the use of this method in future work to scrutinise the appropriateness of relatively under-utilised subjective performance measures of public sector organisations, as this will generate more insights into the extensive debate about performance measurements in the public sector.

Having the methodology to examine bias, the question arises what can be done to deal with method bias. For a further discussion on this topic, we would like to suggest Rogelberg's (2008) handbook on research methods, which offers a number of suggestions as to how to cope with method variance and error variance. One solu-

tion is to nest MTMM within the model that has to be estimated, as the MTMM model can be used to control for method and error variance. However, to maintain a decent ratio of observations to variables in a structural equation model of minimally 5:1 (Hair et al., 1998), one would need to have potentially hundreds or thousands of observations to run a structural equation model with a nested MTMM model. This is often not feasible when working with subjective measures, as datasets of interviewees or survey respondents are simply not that large. Rogelberg (2008) also suggests a number of other solutions, such as controlling for the believed causes of bias by measuring them and including them in the analysis, or taking a (weighted) average of different scores of informants.

Blindenbach-Driessen et al. (2010) find in their product innovation study one type of rater to be very accurate on some variables opposed to the other type of rater. They therefore suggest that it may be better to only include the raters of the first group in their analysis rather than unnecessarily biasing the results by including both raters. Knowing the sources of variance in the data leads to a range of opportunities to control for bias. This can be more or less statistically demanding, but nevertheless a methodological improvement for public administration and policy studies.

For the police, the findings may also have implications. The police must indeed try to satisfy all stakeholders from the perspective of normative stakeholder management. Knowing which stakeholders hold biases or who are simply unknowing may encourage the police to take up other/additional management strategies towards these stakeholders. This allows them to tend appropriately to the thoughts of all stakeholders.

As an implication for the studies done in this thesis, we have to admit that our studies might have benefited from the use of an MTMM model. A shortcoming of Chapter 2 was that we asked police officers how satisfied they perceived stakeholders to be. Compared to a smaller number of external stakeholders, who were asked the same questions, we found that the external stakeholders did not differ significantly in their rating of police performance on

stakeholders' expectations. The implications from this chapter for Chapter 2 are that even if we would have asked stakeholders how they feel about how the police performs on their expectations, we might still get biased answers, such that optimally we might also like to use an MTMM model in a study like that. This that was not feasible in Chapter 2, due to the size of the sample, but could be a suggestion for future research. In Chapters 3 and 4, we have asked individuals from a range of organisations to limit the professional bias, but the sample is not completely random. It would have been interesting to test for structural biases amongst respondents from different professional groups (e.g. justice, healthcare, social work) yet, again, the sample was too small.

Chapter 6

Conclusion

6.1 Discussion of the results

With this thesis, we aim to gain more insights into the stakeholder management strategies of police forces, and how these are related to performance, placing the satisfaction and perceptions of stakeholders central, in line with normative stakeholder theory. We study this topic from different perspectives, initially very broadly, by looking at how the police manages a diverse range of stakeholders (Chapter 2). Having found that the police often collaborate with their key stakeholders, we put more focus on how such collaborations take shape. In Chapters 3 and 4 we investigate the people amongst whom, and the environment in which complex collaborations take place. Lastly, we concluded with a cautionary note about subjective performance measurement in the face of multiple stakeholders (Chapter 5).

In Chapter 2, we investigate how perceived performance on the expectations of stakeholders is associated with the (theoretically) appropriate management of stakeholders. Furthermore, we investigate the relation between active management and the difficulty of stakeholder handling and the performance on their expectations. We argue, in line with most theories, that different stakeholders should be tended to in the appropriate manner, and propose differ-

ent strategies based on the level of influence and interests of stakeholders. We do argue, however, that stakeholders will always like to be recognised by the police and, furthermore, that some stakeholders will always be difficult to handle, regardless of strategy. Some stakeholders simply have very little understanding of policing, and might always demand more than is feasible, or reasonable. We substantiate this argument with the significant associations we find in the data, although we cannot produce causal claims regarding these findings.

The results are much in line with our expectations. We find that respondents rate the performance of their force on the expectations of stakeholders higher when the force employed the theoretically optimal strategy. The expectations of stakeholders are also better met when stakeholders are actively managed, and when the police does not find it difficult to manage the expectations of stakeholders. These findings may suggest that these are relevant variables for further exploration.

While we do find in Chapter 2 that the police collaborates more often with stakeholders than theory would predict, given the high influence and interests of many stakeholders, this stakeholder management strategy is probably also the one that should be employed the most by police forces, or at least with key stakeholders. We question what characteristics of cooperation between the police and stakeholders are associated with the greatest satisfaction. Cooperation between organisations has been studied in many forms, from alliance theory to empirical work on healthcare networks. Yet, we believe that police organisations, and their individual officers, will often have to collaborate in such complex circumstances that we have to contribute to the literature in attempt to reveal how some of these difficulties can be overcome. We believe that the complexity of collaboration is caused by three circumstances:

1. Collaboration is focused on producing public goods,
2. Collaboration is between different organisations with their own agendas, and

3. Collaboration is often interdisciplinary.

The nature of external stakeholders (opposed to internal stakeholders) implies that police organisations deal with other organisations and professionals from other organisations. These organisations have their own agendas and performance measures, which are not necessarily in line with the police's. Although this is a complex setting in which an organisation might not desire to find itself, we believe that studying this context is highly relevant for the police. Societal problems can be so complex that police may have to work with stakeholders from other disciplines to tackle some issues. From the repressive perspective, the police may often do quite well with organisations in their own judicial discipline. Yet, in order to prevent crimes from happening, it is more straightforward to take care of the causes, which may be addiction, unstable mental health, poor social networks or status, which are all specialties of other public organisations, rather than the police.

In Chapter 3, we argue that such public, interdisciplinary and interorganisational (PII) collaboration in teams will suit some professionals better than others. Bronstein (2003), who has done research on public interdisciplinary teams, provides a good framework to start from. She argues that professionals in such teams who have favourable personal and professional characteristics will collaborate better, which is much in line with the general literature on cooperation and performance in teams. Furthermore, collaboration experience of individuals facilitates collaboration, as do structural characteristics, such as the time and freedom individuals have to work together. This time and freedom aspect in interorganisational teams is, of course, especially interesting, because different organisations may put in place different limits on the time and freedom of team members.

By means of a survey, data were gathered on the individuals that participate in these PII teams. We find overall extraversion to be positively related to cooperation in the teams, unlike what one would expect in regular teams, where extraversion of all team members is not optimal. In PII teams, it is however crucial

for everyone to participate in information exchange and decision-making, which requires an extrovert attitude of all team members. The resistance that team members experience in their home organisations is negatively related to cooperation. It supports to some extent the argument that cooperation will be hindered when professionals make promises that their home organisations will not keep, although we cannot make a causal claim. Perhaps the most interesting finding is that the autonomy of professionals is positively related to cooperation within the team, but negatively correlated with perceived performance of the team. Our argument here is that autonomous professionals find it easier to make decisions, which is useful in cooperating with other team members. However, the negative correlation with perceived performance could not be explained. We speculated that autonomous professionals possibly do not have the strongest ties to their home organisations, which often have to execute the agreements made in the team. Future research may be able to point out if this relation still holds and if it does, why so.

Having appropriate individuals in the team is important for good collaboration (Smith and Mogro-Wilson, 2007). In practise, however, teams will not always have the opportunity to choose the best team members. Human resources are scarce, and organisations will not always send their best-fitting people. To get the best out of any PII team, structural characteristics can be offered to the team to facilitate their collaboration. We investigated in Chapter 4 which structural characteristics can contribute to cooperation. Literature about network governance (Kenis and Provan, 2009) suggests that networks with many partners and decentralised trust are best governed by an independent body, a so-called network administrative organisation (NAO). In our country of study for Chapters 3 and 4, we find this to be the case for safety networks. We suggest in Chapter 4 that NAOs can be more than an administrative back office. When teams are involved, they can actively support teams to improve collaboration amongst team members, and their respective home organisations. Bronstein (2003) suggests that structural char-

acteristics, such as organising meetings frequently and of sufficient duration, will enhance collaboration, because it offers professionals the opportunity to meet and work together. Because leadership skills also facilitate interdisciplinary cooperation, we argue that in this context meetings are best guided by a skilled chair, who will make sure that everyone is heard, in order to come to the optimal solution or productive compromise, if necessary. We found significant associations between all these variables and perceived collaboration. Lastly, we also found a positive relation between perceived collaboration and teams having workspaces at the network location. The argument here was that this allows professionals to discuss issues amongst each other that are not completely necessary to discuss with the whole team. Furthermore, it gives professionals the opportunity to spend more time together and get to know each other also on an informal, personal level, rather than the relatively high pressure that meetings tend to be under. Despite the statistically significant relations, we did not find the coefficients of all variables to be so large as to have practical significance as well. Meeting frequency and time spent at the network location had such low coefficients that they are perhaps not of the greatest interest for future research, or in view of policy implications.

In line with normative stakeholder theory, which has a focus on perceived performance and satisfaction of stakeholders, we have asked many police officers and stakeholders throughout the studies in this thesis how they feel about the performance of the police and collaboration with police organisations. Evidently, police officers may be positively biased when it comes to their own performance. Bias may give distorted results, and we have tried to take this into account in all chapters. In Chapter 2, the observations of police officers did not significantly differ from those of external stakeholders. In Chapters 3 and 4, we have tried to overcome bias by questioning professionals from many different organisations to get a more representative view, and used existing scales where possible, to check for reliability. In the field of police performance, the focus is often on objective measures, such as targets

set by the government. These only may satisfy a few stakeholders, however, while the police should try to satisfy everyone. This means the police should measure the opinions from stakeholder groups that may not be as pleased with objective metrics. The field of police performance has not paid much attention to subjective measures that have been proven to be unbiased. In fact, we know very little about biases in subjective performance measures. This is actually of great importance, for researchers on the one hand, because biases cause over- or underestimations in statistical analysis. On the other hand, it is also relevant for the police, because performance on 'objective' measures does not please all stakeholders, and secondly, management strategies may not be as effective towards stakeholders if these stakeholders hold severe negative biases towards the police.

In Chapter 5, we offer a solution for finding appropriate subjective performance measures in public management, focusing on the specific example of policing. By means of a multi-trait-multi-method (MTMM) model, one can test how biased and unknowing different types of respondents are regarding certain performance measures. Data from the European Social Survey is used to assess how police officers, health professionals and corporate managers feel as to the arrival times, catching burglars and taking bribes of police forces in their country. The MTMM model proves to be very useful in showing that, in fact, all respondents are biased (either positively or negatively), but that all also have a very poor estimation of performance, because they simply have no idea how good performance is.

While the MTMM model is associated with some methodological hurdles, the findings warrant further use of this model, because the benefits are plenty. Not only does it allow researchers to pick and choose their most appropriate measures, but the MTMM model can also be nested into another model to provide unbiased and informed scores, even when measures contain bias and error. We hope this methodology will be picked up by scholars in public management in the future, because we believe it can bring bene-

fits to studying many different public organisations that have to deal with a broad range of stakeholders that they have to please. Secondly, it may also help these public organisations to find out to what extent their stakeholders' opinions are based on bias or a lack of knowledge, rather than the actual actions of the organisation.

In sum, this thesis contributes to the topic of stakeholder management in policing in conceptual, methodological and empirical ways. The overall contribution is that we give more insights into the relationship between police organisations and their stakeholders. We know more about which methods the police employ to manage stakeholders, and how these methods are associated with perceived stakeholder satisfaction. We looked more deeply into the stakeholder management strategy the police employs with many key stakeholders, to see which factors are associated with a more positive perception of the collaborative effort. Lastly, we recognise that the stakeholders may have a biased view or are unknowing of police performance, and that this should be taken into account in research and practice alike. The findings are often in line with our expectations, but sometimes they are counterintuitive. All chapters offer surprising findings, sometimes already in the descriptive data. In Chapter 2, we found a correlation between managing stakeholders in the right way and greater performance on expectations of stakeholders. Currently, the police surprisingly often collaborate with stakeholders, much more than theory can explain. Although we do not find that stakeholders are (on average) dissatisfied if they are 'wrongly' managed, the 'correctly' managed stakeholders are, on average, more satisfied.

In Chapters 3 and 4 we find that some types of professionals and some structural characteristics of PII teams are correlated either positively or negatively to the perceived success of these complex partnerships. Surprisingly enough, there seems to be little effort put into optimising PII teams; the stakeholders are often in disagreement about the team and its performance. There appears to be little team cohesion and even less reflection on team collaboration. Some team members even expressed in interviews that they have

no idea what to expect from one another. The collaboration is very much focused on content, which involves discussing clients, and much less on the process of actually coming to a good solution together. It seems that the police, other public organisations and the NAO in the Safety House may have to consider making improvements here, given the complex nature of their collaboration.

In the final study, our main goal is to demonstrate the usefulness of MTMM models in subjective performance measurement in public administration, yet we are surprised to find that so much of the variance was attributed to bias. In conclusion, we can say that these studies do not only contribute in the manners we had strived for, but actually give us several additional interesting insights into the relationships between police organisations and their stakeholders.

To finalise the discussion of results, Table 6.1 gives an overview of the tested hypotheses per chapter, whether there is support for the hypothesis, and additional findings for Chapters 2 through 5.

6.2 Limitations and future research

Although this dissertation is a serious step towards deepening our understanding of the successes and hazards in stakeholder management in police organisations, there are a number of limitations in the current studies that warrant future research.

First of all, the studies we did are quite explorative and correlational in nature. We hope to have given some impulses to further research, such that in the future we may be able to draw strong(er) conclusions about the causal nature of the relations we studied, which may allow us in turn to make more valid policy implications. A strong research design would be required to do so, ideally in the setting of a randomised experiment. Given that this may be difficult, it would be at least desirable to compose a panel dataset, to better control for omitted variable bias by including fixed and random effects.

Table 6.1: Overview of chapter hypotheses and (additional) findings

Chapter	Hypothesis	Hypothesis supported	Additional findings
2	H1: Fit in management and performance (+)	Yes	Police collaborates much more than theory can explain.
	H2: Active management and performance (+)	Yes	
	H3: Difficulty to manage and performance (-)	Yes	
3	H1: Extraversion and cooperation (+)	Yes	There is little effort put into optimising PII teams; the stakeholders are often in disagreement about the team and its performance. There appears to be little team cohesion and even less reflection on team collaboration. Team members have no idea what to expect from one another. The collaboration is very much focused on content, which involves discussing clients, and not on the process of actually coming to a good solution together.
	H2: Autonomy and cooperation (+)	Yes	
	H3: Resistance and cooperation (-)	Yes	
	H4: Collaboration history and collaboration (+)	No	
	H5: Collaboration and performance (+)	Yes	
	H6: Extraversion and performance (+)	No	
	H7: Autonomy and performance (+)	No	
	H8: Extraversion mediates between collaboration and performance (+)	No	
	H8: Autonomy mediates between collaboration and performance (+)	Yes	
4	H1: Meeting frequency and cooperation (+)	Yes	Both citizens and police officers are mostly biased and unknowing about police performance.
	H2: Meeting duration and cooperation (+)	Yes	
	H3: Chair's skill and cooperation (+)	Yes	
	H4: Disagreement on chair's skill and cooperation (-)	Yes	
	H5: Disagreement on chair's skill mediates between chair's skill and cooperation (-)	No	
	H6: Time spend at network location and cooperation (+)	Yes	
5	N/A	N/A	

The reason for this dissertation is that stakeholder management in policing is a current, and highly relevant topic. In Europe, where all studies have been conducted, police organisations struggle with managing their stakeholders. On the one hand, the police is a public organisation that needs a lot of legitimacy from the public to properly execute its tasks. As such, they must please a wide array of stakeholders. On the other hand, the core business of the police is getting more complex, requiring the involvement of stakeholders regarding specific issues. An example is the free movement of goods and persons facilitating intra-European crime. Many European countries have seen their police organisations becoming more service and community oriented, while they used to be a relatively unapproachable authority. Policing nowadays goes much further than order maintenance and solving criminal cases. These 'core tasks' are more and more often complemented by activities such as prevention, reintegration and keeping warm relations with com-

munities. Police organisations will often find themselves in a situation where they will need to work with other parties to execute all these tasks properly, and to keep all the involved stakeholders satisfied.

Our main focus in this dissertation, in Chapters 3 and 4, has been on collaboration between the police and other parties. We know from Chapter 2 that police organisations often collaborate with stakeholders, causing us to take deeper interest in this strategy. However, we have not yet provided an elaborate answer as to how to approach all those stakeholders with whom the police does not collaborate. So, we may question what successful 'involvement', 'defence' and 'monitoring' strategies are, and on what their success depends. Some stakeholder groups, such as the media or citizens, may be particularly interesting stakeholder groups to study in relation to these management strategies.

Secondly, we have focused much on the 'service and community' side of police collaborations. The integrative approach that can be taken towards certain groups of offenders is complex, and thus interesting to study, but of course this is not the only type of cooperation that the police is engaged in. We should not forget that police forces will often have to cooperate with each other in criminal investigations, across the country or internationally. Although our studies do give some hints at what the barriers in such collaborations may be, such as organisational resistance, there may be other hurdles to overcome, or other success factors to emphasise, when collaboration is public and interorganisational, but mono-disciplinary.

6.3 Policy implications

Like we have said in Chapters 2 through 4, we have to be careful about making policy implications given the correlational nature of our studies. Our results from Chapter 2 do provide some interesting findings, even though we cannot be certain about causation. We find that, on average, the police perceive that stakeholders are

quite satisfied with the performance on expectations, even when stakeholders are (theoretically) mismanaged. As such, there may be no immediate concern for mismanagement of stakeholders, although we cannot be sure whether the perceptions of the police are a valid measure here. Furthermore, we do see a positive relation between 'fit' management and performance on expectations, which warrants further investigation.

Although we see that police organisations collaborate more often with stakeholders than theory can explain, we must recognise that the police has many stakeholders that will (theoretically) be most satisfied with this management method, and with whom the police can even mutually improve performance by working together. This is a result from the observation that in increasingly complex societies public organisations like to take an integrated approach to solving 'wicked' multidisciplinary problems. Yet, these collaborations are generally difficult, because several organisations from different disciplines try to come to an optimal solution. Organisations and their respective professionals generally do not understand each other's languages and have their own (hidden) agendas. They often produce public goods, or solutions to problems, of which the value cannot always be measured. Hence, organisations often have to trust that their collaborative actions are worth the effort. When studying these interdisciplinary public networks, we find that the perception of the collaborative relationship is associated with participation of the right individuals and the right structures being in place. Again, our correlational study cannot offer solid policy implications.

In our final chapter, we encourage the use of MTMM models in public administration to benefit optimally from subjective performance measures in research. We can however also draw a policy implication for police forces. That is, the police should recognise that both police officers and external parties may not only be biased about performance, but they may in fact have no clue how well the police is performing. The policy implication is to maintain good lines of communication with stakeholders, and to provide relevant

information in terms of what the police does, how well they perform, and what may be expected of them. This may be more useful in terms of influencing the stakeholders' perceptions than changing overall stakeholder management strategies. Citizens, for example, may have very limited knowledge of police performance, because individually many citizens in fact do not deal with police officers on a frequent basis. Yet, everybody has an image of the police, and how they perform. Police forces can possibly do more to inform citizens about their performance, such that the views of citizens will be more realistic. This might also give them more reasonable expectations of the police.

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Appendix A

Supplements to Chapter 2

We carefully coded the answers of all interviewees as to stakeholder-relevant questions to construct a dataset with codes for stakeholder types, management methods and performance perceptions. Combining both codes as to stakeholder types and management methods gave our assessment of fit or misfit. The next figures visualise our coding schemes for stakeholder types and management methods. The lists with relevant items are included on the next pages.

Figure A.1: Stakeholder type coding scheme

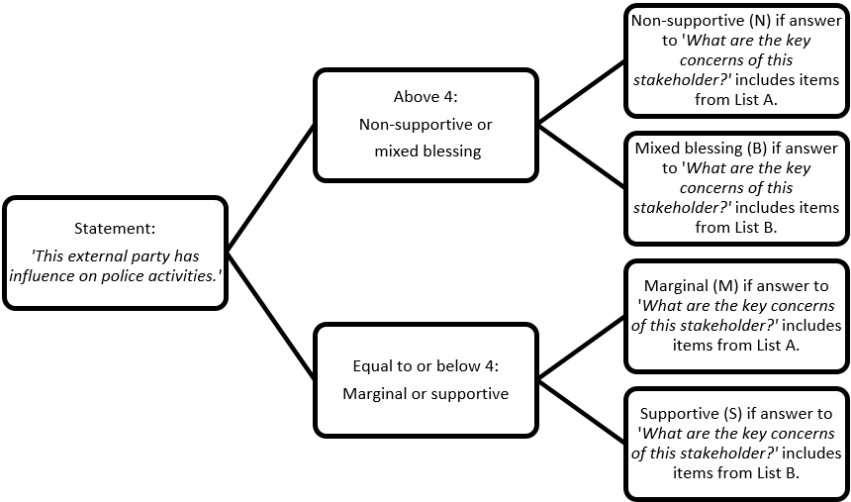


Table A.1: Stakeholder interest lists

List A	List B
<ul style="list-style-type: none">- issues that are not related to the police- for stakeholder and police to do their own job- offer information to the police- offer assistance to the police- for the police not to intervene- taking over work from the police in a competitive manner- stakeholder has to operate by itself- police is concerned about how stakeholder perceives the police	<ul style="list-style-type: none">- prevent and act against crime / criminal behavior- contribution to safety- protection- maintaining public order- upholding the laws- execute stakeholder's orders- ensure safe environment / conditions- information (exchange)- cooperation / collaboration- achievement of common goals- offer assistance / support- attention- trust- sticking to agreements / protocol- authority- dialogue with the police- the police as mediator- accessible police officers- for the police to do their job in a fair way- presence of police on the streets- good performance- for the police to solve problems- professional relationship- submission of complete case reports- act in the interest of the stakeholder- solve issues

Figure A.2: Management method coding scheme

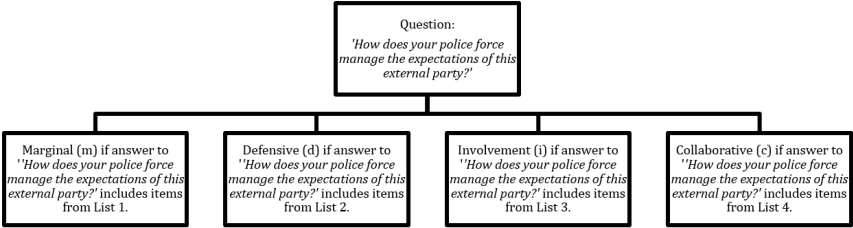


Table A.2: Management strategies lists

List 1	List 2	List 3	List 4
<ul style="list-style-type: none"> - getting to know each other's tasks and responsibilities - rare collaboration - parties take care of their own responsibilities - reporting people who can be helped by stakeholder - think along with stakeholder - no interaction with stakeholder - ad-hoc (informal) contacts - ad-hoc meetings - monitoring stakeholder's behaviour - presence of officers - ignore requests from stakeholder - meeting at community events - questionnaires to ask stakeholder about expectations - indirect contacts - give general information to stakeholder about police - relationship with stakeholder is purely institutional - (semi) annual meetings - use questionnaires to find out the demands of stakeholder - build networks 	<ul style="list-style-type: none"> - responding quickly to demands - meditation between stakeholders - trying to explain operations to stakeholders - offering assistance where needed - provide high level of professionalism - try to meet requests of stakeholder - difficult to manage because stakeholder makes itself unavailable, although police wants contact 	<ul style="list-style-type: none"> - monthly meetings - attending meetings when possible - police joins some meetings of stakeholder - invite stakeholder to participate in specific projects - listening to and communicating with the stakeholder - assist stakeholder in projects - (ad-hoc) task forces - project-related consultation platforms - consultation of stakeholder - using offers from stakeholder - keeping contact with stakeholder - information exchange - circulars and guidelines - citizen care offices - community relationships offices 	<ul style="list-style-type: none"> - deliberation - cooperation with stakeholder / collaborative atmosphere - rules, protocols and regulations - various forms of meetings - exchanging stakeholder's demands for obligations - constant contact - weekly meetings - attendance to all of the stakeholder's meetings - making agreements - meetings in which police can influence policy of stakeholder - liaison managers - coordination platforms - direct contacts

Appendix B

Supplements to Chapters 3 and 4

English translation of the Safety Houses survey

Welcome to the survey Safety Houses

This survey has been developed by the Universities of Utrecht and Tilburg to study collaboration during case meetings in Safety Houses. The goal of this study is to find out how the characteristics of the case meeting and its participants influence successful collaboration in the case meeting. We will ask different questions about your background and tasks in the Safety House. Our tests persons show that one should be able to fill in the survey properly in 15 minutes, although others take up to 30 minutes. Please be patient when filling in the survey. Given the complexity of the analysis, it is of great importance that you answer all the questions decently. We have already removed questions out of previous versions of the survey to make it as compact as possible.

All that you write down in this survey is of course confidential. The scientific studies will only provide statistics about the Safety Houses as a group. We will offer Safety Houses a benchmark report, which will show the means of everyone that has filled in the survey for that specific Safety House. Information will never be traceable to an individual without permission of this individual. Only the scientific staff will be able to look into individual surveys.

We thank you for your time!

1. What is your gender? (please choose one)

- ☐ Male
- ☐ Female

2. What is your year of birth?

.....

3. What is the highest level of education that you have completed? (please choose one)

- ☐ Lower vocational training
- ☐ Higher vocational training
- ☐ University
- ☐ Other:

The questions below are about your employer.

4. For which organisation are you working for the Safety House?

.....

5. What is your position in this organisation?

.....

6. In which year did you start working at this organisation?

.....

7. How many years of experience do you have in the field of healthcare or social work?

.....

8. How many years of experience do you have in the field of justice, policing or parole?

.....

9. How many people are you in charge of in your organisation? (please choose one)

- ☐ None
- ☐ 1-5
- ☐ 6-15
- ☐ 16-50
- ☐ More than 50

10. Below are a number of statements related to the possibility your employer offers to do your work when and how you like it. Please indicate for every statement how often this applies to you. Please use the scale below (please choose one):

Never	Once in a while	Sometimes	Fairly often	(Nearly) always
0	1	2	3	4

Statement	Score (0-4)
1. I decide when to come and leave work	
2. I am required to keep a record of time spent on individual projects	
3. I decide when and how to about my job	
4. I am able to obtain the resources I need for my job without asking for permission	

11. How much influence do you have on the choice of projects on which you are asked to work? (Please choose one.)

- ☐ None
- ☐ A little
- ☐ Some
- ☐ Much

12. For which Safety House do you work? (If several, choose one at random) ..

13. What is the official name of the case meeting you work for in above mentioned Safety House? (If several, choose one at random.)

.....

14. In which city does this case meeting take place?

15. Which target group do you discuss in your case meeting? (Multiple answers possible.)

Age

- ☐ Adults
- ☐ Minors

Problem

- ☐ Repeat offenders
- ☐ Domestic violence
- ☐ (ex)-Convicts
- ☐ Nuisance
- ☐ High-risk groups
- ☐ Other:

Type of case meeting

- ☐ Penalization meeting

16. Are you the only representative of your organisation in this case meeting? (Please choose one.)

- ☐ Yes
- ☐ No, there are ...representatives of my organisation in this case meeting

17. How often does your case-meeting take place? (please choose one)

- ☐ Weekly
- ☐ Bi-weekly
- ☐ Monthly
- ☐ Other:

18. How often are you present at the case-meeting? (please choose one)

- ☐ (Nearly) never
- ☐ A quarter of the time
- ☐ Half of the time
- ☐ Three-quarters of the time
- ☐ (Nearly) all the time

19. How long does a case-meeting usually last? (please choose one)

- ☐ Less than an hour
- ☐ An hour
- ☐ One and a half hours
- ☐ Two hours
- ☐ More than two hours

20. On average, how many clients do you discuss during a meeting? ... clients

21. How well do you know the clients that are discussed during meetings?

...% I know personally

...% I do not know personally, but I do know from their files

...% I only know by name

...% I do not know at all

22. Are you the chair of your case meeting? (please choose one)

- ☐ Yes → Go to question 24
- ☐ No, someone else is the chair
- ☐ No, this meeting does not have a chair → Go to question 26

23. Which organisation does the chair of your case meeting come from?

.....

24. How important is the chair for the functioning of the case meeting? (please choose one)

- ☐ Very unimportant
- ☐ Unimportant
- ☐ Neutral
- ☐ Important
- ☐ Very important

25. How effective is the chair of the case meeting? (please choose one)

- ☐ Very ineffective
- ☐ Ineffective
- ☐ Neutral
- ☐ Effective
- ☐ Very effective

26. In which year did you start working for the Safety House?

.....

27. How did you become a participant in the Safety House? (please choose one)

- ☐ Out of my own initiative → Go to question 29
- ☐ Out of the initiative of my employer

28. Have you been especially selected to participate in the Safety House? (please choose one)

- ☐ Yes
- ☐ No
- ☐ I don't know

29. How many hours per week are made available to you by your employer to work for the Safety House? (These may also be general network hours, if your organisation does not officially participate in the Safety House.)

... hours (in case of 0 hours → go to question 32)

30. How many hours per week do you spend on the following tasks in the Safety House?

Presence in the case meeting: ... hour(s)

Preparation of the case meeting: ... hour(s) (including deliberation with your colleagues)

Staying in touch with participants outside the case meeting: ... hour(s)

31. How many hours per week are you physically present in the Safety House?

... hours (in case of 0 hours → go to question 32)

32. How many percent of the time you are physically present in the Safety House do you spend on working on primary tasks? (That is, tasks that fall under the task description from your employer.)

... %

33. Below you see a list with characteristics of people. Please indicate to what extent you have this characteristics, and try to be as honest as possible (please choose one)

I am...

	Completely disagree	Disagree	Disagree a little	Neutral	Agree a little	Agree	Complete agree
imaginative	()	()	()	()	()	()	()
irritable	()	()	()	()	()	()	()
sloppy	()	()	()	()	()	()	()
restrained	()	()	()	()	()	()	()
nice	()	()	()	()	()	()	()
searching	()	()	()	()	()	()	()
nervous	()	()	()	()	()	()	()
careful	()	()	()	()	()	()	()
silent	()	()	()	()	()	()	()
helpful	()	()	()	()	()	()	()
easily upset	()	()	()	()	()	()	()
orderly	()	()	()	()	()	()	()
closed	()	()	()	()	()	()	()
versatile	()	()	()	()	()	()	()
friendly	()	()	()	()	()	()	()

	Completely disagree	Disagree	Disagree a little	Neutral	Agree a little	Agree	Complete agree
anxious	()	()	()	()	()	()	()
accurate	()	()	()	()	()	()	()
talkative	()	()	()	()	()	()	()
innovative	()	()	()	()	()	()	()
helpful	()	()	()	()	()	()	()
shy	()	()	()	()	()	()	()
pleasant	()	()	()	()	()	()	()
artistic	()	()	()	()	()	()	()
anxious	()	()	()	()	()	()	()
neat	()	()	()	()	()	()	()
withdrawn	()	()	()	()	()	()	()
systematic	()	()	()	()	()	()	()
sympathetic	()	()	()	()	()	()	()
nervous	()	()	()	()	()	()	()
creative	()	()	()	()	()	()	()

In the Safety House you will often have to make agreements with partners about clients who have been discussed in the case meeting. You will often need people within your own organisation to execute these agreements. In this section we will ask you question about how you and your Safety House go about this.

34. How often does it happen that you cannot execute agreements made in the Safety house due to resistance from your own organisation? (please choose one)

- ☐ Never → Go to question 33
- ☐ Rarely
- ☐ Sometimes
- ☐ Fairly often
- ☐ (Nearly) always

35. Who will offer resistance? (please choose one)

- ☐ Generally operational staff
- ☐ Generally management staff
- ☐ Both

36. Imagine that you cannot execute an agreement made in the Safety House due to resistance of your own organisation. Who within the Safety House has the mandate to solve such a problem? (multiple answers possible)

- ☐ The manager of the Safety House
- ☐ The chair of the case meeting
- ☐ The board of the Safety House
- ☐ Other: ...

37. Imagine that you cannot execute an agreement made in the Safety House due to resistance of your own organisation. Who is the most likely person to solve this problem? (please choose one)

- ☐ The manager of the Safety House
- ☐ The chair of the case meeting
- ☐ The board of the Safety House
- ☐ My direct supervisor
- ☐ Someone at a strategic/tactical level in my own organisation
- ☐ Other: ...

38. Below are a number of statements about the relationship between your organisation and the Safety House. Please read the statements and indicate to what extent you agree or disagree with these statements. Give your answer in the box on the right by means of the following answering key:

Completely disagree	Disagree	Neutral	Agree	Completely agree
1	2	3	4	5

	Statement	Score (1-5)
1.	The board of my organisation believes in the use of the Safety House	
2.	My direct supervisor believes in the use of the Safety House	
3.	Operational staff from my organisation believes in the use of the Safety House	
4.	My direct supervisor backs me when it comes to executing agreements that I have made in the Safety House	
5.	Operational staff from my organisation backs me when it comes to executing agreements that I have made in the Safety House	
6.	Agreements that I make in the Safety House meet the expectations that people in my own organisation have	

39. Below are a number of statements about the case meeting in which you participate. Please indicate to what extent you (dis)agree using this answering key:

Completely disagree	Disagree	Neutral	Agree	Completely agree
1	2	3	4	5

	Statement	Score (1-5)
1.	Team members discuss strategies to improve their working relationship.	
2.	The team works together to resolve problems among members.	
3.	The team incorporates feedback about its process to strengthen its effectiveness.	
4.	The team informally and/or formally evaluates how they work together.	
5.	Team members talk about similarities and differences among their professional roles in working with clients.	
6.	Members of the team address conflicts with each other directly.	
7.	The team discusses the degree to which each professional should be involved with a particular case.	
8.	Team members talk about ways to involve additional professionals with various expertises in the team.	
9.	There are "turf" issues among members of the team.	
10.	The team does not welcome new ideas about how to help clients.	
11.	Team members respect one another even when they have different ideas about how to help clients.	
12.	The team has appropriate expectations of the roles of members in supporting clients.	
13.	The team respects the opinion and input of each member.	
14.	There is open communication among team members.	
15.	Team members focus on understanding the perspectives of others rather than defending their own specific opinions.	
16.	The team supports each member in his or her work with clients.	
17.	There is freedom to be different and disagree within the team.	
18.	New practices related to working with clients occur as a result of the diversity of ideas among team members.	
19.	Working with team members who have multiple perspectives results in new programmes available to help clients.	
20.	The roles and/or responsibilities of team members change as a result of team-work.	
21.	As a result of working as a team, services/supports for clients are delivered in new ways.	
22.	Team members take on tasks outside their role when necessary.	
23.	The team depends on members with varying roles (e.g., police, public prosecution, mental healthcare, parole, etc) to implement specific activities.	
24.	The team relies on members with varying roles (e.g., police, public prosecution, mental healthcare, parole, etc) to accomplish its goals.	
25.	The team makes distinctions among the roles and responsibilities of each member.	
26.	The team consults with members who have a variety of perspectives about how to address the needs of clients.	

40. Below are a number of statements about the case meeting in which you participate. Please read the statements and indicate to what extent you are satisfied or dissatisfied. Give your answer in the box on the right by means of the following answering key:

Completely dissatisfied	Dissatisfied	Neutral	Satisfied	Completely satisfied
1	2	3	4	5

	Statement	Score (1-5)
1.	Performance of the case meeting in general	
2.	Discussion time per client during the case meeting	
3.	Number of discussed clients opposed to the whole target group	
4.	The quality of interventions produced by the case meeting	
5.	The participation of police/judicial partners in the Safety House	
6.	The participation of parole partners in the Safety House	
7.	The participation of healthcare and social work partners in the Safety House	
8.	The participation of municipal partners in the Safety House	
9.	The participation of youth partners in the Safety House	

This is the end of the survey. Thank you for your time. If you have any questions or suggestions please let us know in the space below.

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